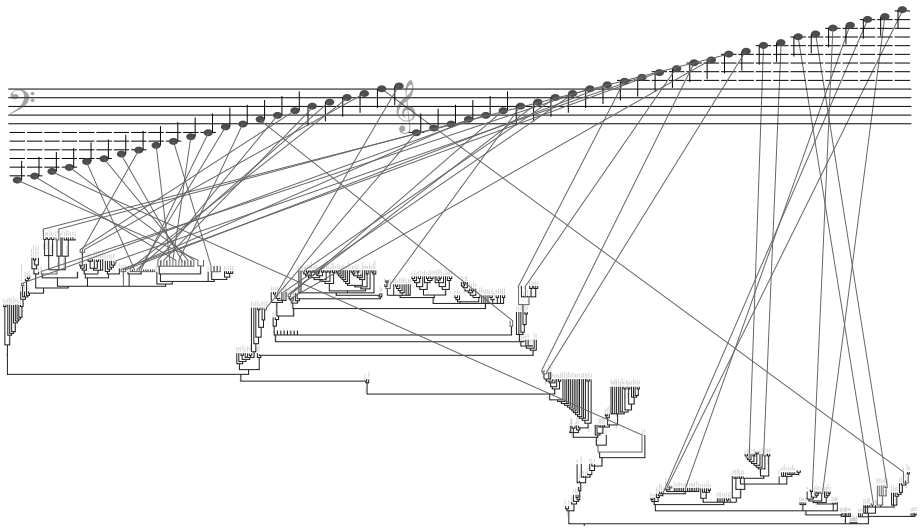


SINCRONÍA

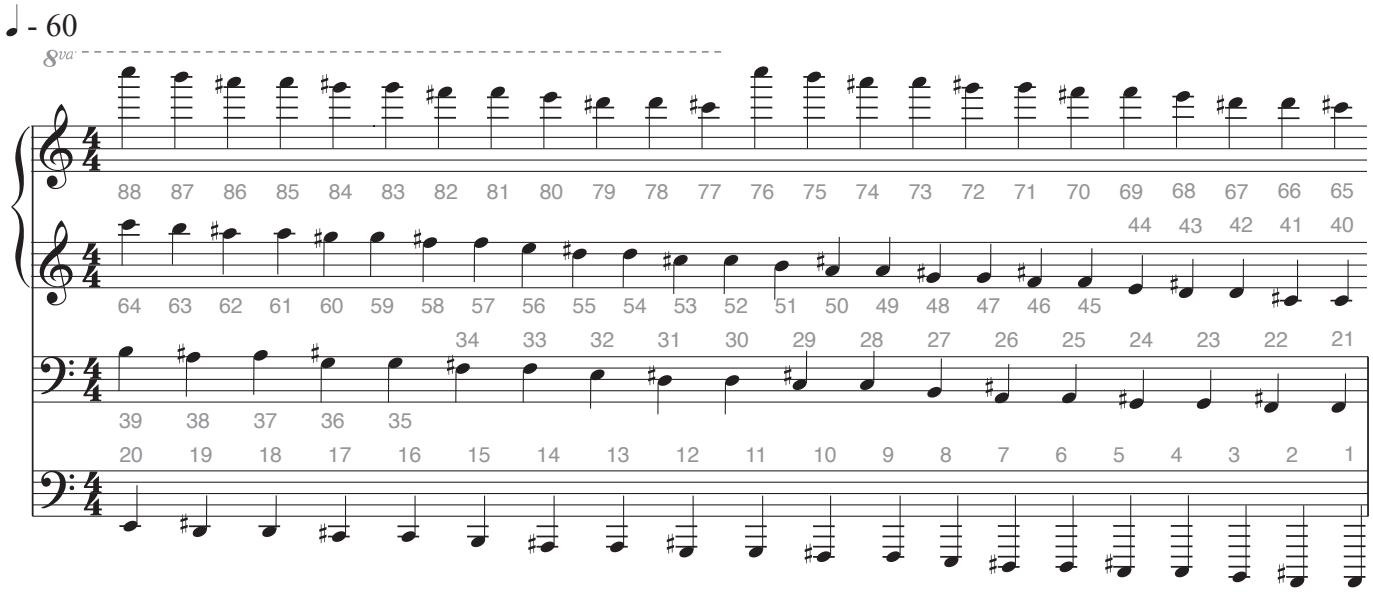
Para dos pianos a cuatro manos

Lorena Mal
Emilio Hinojosa Carrión

Sincronía

Mapa de datos de orden de escalas

Escala musical - Escala en tamaño promedio de las especies



𝄞

C88: Siphonaptera [Pulga, do 9]
87: Cimex lectularius [Chinche, si 8]
86: Lepidoptera [Mariposa, la#8]
85: Anisoptera [Libelula, la 8]
84: Hylotrupes bajulus [Polilla, sol#8]
83: Caelifera [Saltamontes, sol 8]
82: Pycnogonida [Araña de mar, fa#8]
81: Achaearanea tepidariorum [Araña, fa 8]
80: Helix aspersa [Caracol, mi 8]
79: Mesodesma mactroides [Almeja, re#8]
78: Mytilus galloprovincialis [Mejillón, re 8]
77: Podarcis hispanicus [Lagartija, do#8]
76: Caridea [Camarón, do 8]
75: Palinurus elephas [Langosta, si 7]
74: Carcinus maenas [Cangrejo, la#7]
73: Salamandra [Salamandra, la 7]
72: Trochilinae [Colibrí, sol#7]
71: Rattus norvegicus [Rata, sol 7]
70: Asteroidea [Estrella de mar, fa#7]
69: Passer domesticus [Gorrión, fa 7]
68: Pelophylax perezi [Rana, mi 7]
67: Bufo bufo [Sapo, re #7]
66: Serpentes [Serpiente, re 7]
65: Didelphimorphia [Zarigüeya, do #7]
64: Suncus murinus [Musaraña, do 7]
63: Corynorhinus townsendii [Murciélago, si 6]
62: Columba livia [Paloma, la#6]
61: Iguanidae [Iguana, la 6]
60: Mustela putorius furo [Hurón, sol#6]
59: Erinaceinae [Erizo, sol 6]
58: Thunnus [Atún, fa#6]
57: Oryctolagus cuniculus [Conejo, fa 6]
56: Nothura maculosa [Perdice, mi 6]
55: Melopsittacus undulatus [Perico, re#6]
54: Gallus gallus domesticus [Gallina, re 6]
53: Anas platyrhynchos [Pato, do#6]
52: Anser anser [Ganso, do 6]
51: Falco peregrinus [Halcón, si 5]
50: Accipitridae [Águila, la#5]49: Grus grus [Cisne, la 5]
48: Felis silvestris catus [Gato, sol#5]
47: Erethizon dorsatum [Puercoespín, sol 5]
46: Dasypodidae [Armadillo, fa#5]
45: Talpa europaea [Topo, fa 5]
44: Marmota marmota [Marmota, mi 5]
43: Strigidae [Buho, re #5]
42: Ornithorhynchus anatinus [Ornitorrinco, re 5]
41: Pelecanus onocrotalus [Pelicano, do #5]
40: Testudines [Tortuga, do 5]

𝄢

39: Apteryx australis [Kiwi, si 4]
38: Phascolarctos cinereus [Koala, la#4]
37: Octopus vulgaris [Pulpo, la 4]
36: Vulpini [Zorro, sol#4]
35: Pan troglodytes [Chimpance, sol 4]
34: Canis latrans [Coyote, fa#4]
33: Canis lupus familiaris [Perro, fa 4]
32: Canis lupus [Lobo, mi 4]
31: Ovis orientalis aries [Oveja, re#4]
30: Capra aegagrus hircus [Cabra, re 4]
29: Spheniscidae [Pingüino, do#4]
28: Homo sapiens [Humano, do 4]
27: Sus scrofa domestica [Cerdo, si 3]
26: Equus africanus-ferus [Mula, la#3]
25: Lacertilia [Lagarto, la 3]
24: Cervus elaphus [Venado, sol#3]
23: Antilope cervicapra [Antílope, sol 3]
22: Macropus giganteus [Cangüro, fa#3]
21: Panthera leo [León, fa 3]
20: Panthera tigris [Tigre, mi 3]
19: Rhea americana [Avestruz, re#3]
18: Lama glama [Llama, re 3]
17: Phoca vitulina [Foca, do#3]
16: Equus ferus caballus [Caballo, do 3]
15: Camelus bactrianus [Camello, si 2]
14: Odobenus rosmarus [Morsa, la#2]
13: Gorilla [Gorila, la 2]
12: Tursiops truncatus [Delfín, sol#2]
11: Bos primigenius taurus [Vaca, sol 2]
10: Bos primigenius taurus [Toro, fa#2]
9: Bos primigenius taurus [Buey, fa 2]
8: Ursus arctos arctos [Oso, mi 2]
7: Otaria flavescens [Lobo Marino, re#2]
6: Bos primigenius indicus [Cebuino, re 2]
5: Bison bison [Búfalo, do#2]
4: Selachimorph [Tiburón, do 2]
3: Giraffa camelopardalis [Girafa, si 1]
2: Loxodonta africana [Elefante, la#1]
1: Balaena mysticetus [Ballena, la 1]

Índice de movimientos

1. Movimiento no.1-A:
'Estado físico en calma ó Andante'

2. Movimiento no.2:
'Estado físico activo ó Vivace / Presto'

3. Movimiento no.1-B:
'Estado físico en calma ó Andante'

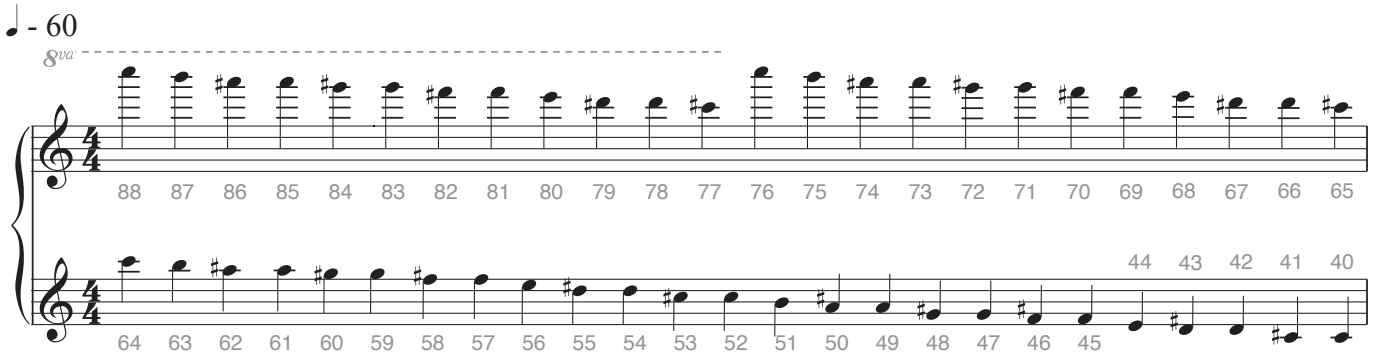
4. Movimiento no.3:
'Estado físico en hibernación y sueño ó Larghissimo / Tranquillo'

5. Movimiento no.4:
'Estado físico límite ó Prestissimo'

Sincronía

Mapa de datos para movimiento no.1: 'Estado físico en calma ó Andante'

Estado rítmico cardiaco en calma de 88 especies animales (clave de Sol)



88: Siphonaptera [Pulga, **do 9**] **| 1/16 1/32**
87: Cimex lectularius [Chinche, **si 8**] **| 1/4**
86: Lepidoptera [Mariposa, **la#8**] **| 1/4**
85: Anisoptera [Libelula, **la 8**] **| 1/8**
84: Hylotrupes bajulus [Polilla, **sol#8**] **| 3/4**
83: Caelifera [Saltamontes, **sol 8**] **| 1/8 1/16**
82: Pycnogonida [Araña de mar, **fa#8**] **| 10/4**
81: Achaearanea tepidariorum [Araña, **fa 8**] **| 1/4 1/32**
80: Helix aspersa [Caracol, **mi 8**] **| 2/4**
79: Mesodesma mactroides [Almeja, **re#8**] **| 60/4**
78: Mytilus galloprovincialis [Mejillón, **re 8**] **| 10/4**
77: Podarcis hispanicus [Lagartija, **do#8**] | **1/8 1/16 1/32**
76: Caridea [Camarón, **do 8**] **| 1/16**
75: Palinurus elephas [Langosta, **si 7**] **| 1/4**
74: Carcinus maenas [Cangrejo, **la#7**] **| 1/4**
73: Salamandra [Salamandra, **la 7**] **| 1/4 1/8**
72: Trochilinae [Colibrí, **sol#7**] **| 1/16**
71: Rattus norvegicus [Rata, **sol 7**] **| c**
70: Asteroidea [Estrella de mar, **fa#7**] **| 10/4**
69: Passer domesticus [Gorrión, **fa 7**] | c
68: Pelophylax perezi [Rana, **mi 7**] **| 1/4**
67: Bufo bufo [Sapo, **re #7**] **| 1/4 1/8**
66: Serpentes [Serpiente, **re 7**] **| 6/4**
65: Didelphimorphia [Zarigüeya, **do #7**] **| 1/16 1/32**
64: Suncus murinus [Musaraña, **do 7**] **| c**
63: Corynorhinus townsendii [Murciélago, **si 6**] **| c**
62: Columba livia [Paloma, **la#6**] **| 1/16 1/32**
61: Iguanidae [Iguana, **la 6**] **| 2/4**
60: Mustela putorius furo [Hurón, **sol#6**] **| 1/16**
59: Erinaceinae [Erizo, **sol 6**] **| 1/16 1/32**
58: Thunnus [Atún, **fa#6**] **| 1/8**
57: Oryctolagus cuniculus [Conejo, **fa 6**] **| 1/16 1/32**
56: Nothura maculosa [Perdice, **mi 6**] **| 1/32**
55: Melopsittacus undulatus [Perico, **re#6**] **| c**
54: Gallus gallus domesticus [Gallina, **re 6**] **| 1/16 1/32**
53: Anas platyrhynchos domesticus [Pato, **do#6**] **| 1/32**
52: Anser anser [Ganso, **do 6**] **| 1/16 1/32**
51: Falco peregrinus [Halcón, **si 5**] **| 1/16**
50: Accipitridae [Águila, **la#5**] **| c**
49: Grus grus [Cisne, **la 5**] **| 1/8 1/32**
48: Felis silvestris catus [Gato, **sol#5**] **| 1/8**
47: Erethizon dorsatum [Puercoespín, **sol 5**] **| 1/4**
46: Dasypodidae [Armadillo, **fa#5**] **| 1/16 1/32**
45: Talpa europaea [Topo, **fa 5**] **| 1/16**
44: Marmota marmota [Marmota, **mi 5**] **| 1/8**
43: Strigidae [Buho, **re #5**] **| 1/16 1/32**
42: Ornithorhynchus anatinus [Ornitorrinco, **re 5**] **| 1/8**
41: Pelecanus onocrotalus [Pelicano, **do #5**] **| 1/8 1/16**
40: Testudines [Tortuga, **do 5**] **| 2/4**

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

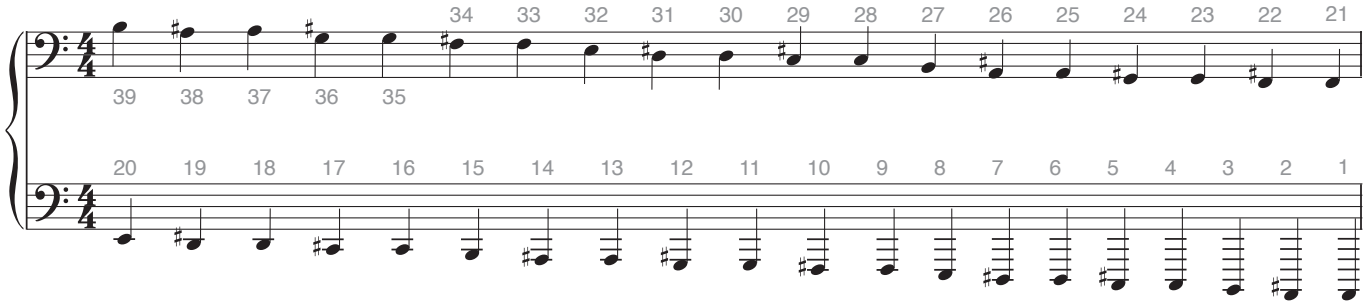
Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

Sincronía

Mapa de datos para movimiento no.1: 'Estado físico en calma ó Andante'

Estado rítmico cardiaco en calma de 88 especies animales (clave de Fa)

♩ - 60



39: Apteryx australis [Kiwi, **si 4**] **I 1/8 1/16**
38: Phascolarctos cinereus [Koala, **la#4**] **I 1/8**
37: Octopus vulgaris [Pulpo, **la 4**] **I 2/4**
36: Vulpini [Zorro, **sol#4**] **I 1/8**
35: Pan troglodytes [Chimpance, **sol 4**] **I 1/8**
34: Canis latrans [Coyote, **fa#4**] **I 1/8**
33: Canis lupus familiaris [Perro, **fa 4**] **I 1/8 1/16**
32: Canis lupus [Lobo, **mi 4**] **I 1/8 1/16 1/32**
31: Ovis orientalis aries [Oveja, **re#4**] **I 1/4**
30: Capra aegagrus hircus [Cabra, **re 4**] **I 1/8 1/16**
29: Spheniscidae [Pingüino, **do#4**] **I 1/8 1/16**
28: Homo sapiens [Humano, **do 4**] **I 1/8 1/32**
27: Sus scrofa domestica [Cerdo, **si 3**] **I 1/8 1/16**
26: Equus africanus-ferus [Mula, **la#3**] **I 2/4**
25: Lacertilia [Lagarto, **la 3**] **I 6/4**
24: Cervus elaphus [Venado, **sol#3**] **I 1/8 1/16**
23: Antilope cervicapra [Antílope, **sol 3**] **I 1/8 1/16**
22: Macropus giganteus [Cangüro, **fa#3**] **I 1/8**
21: Panthera leo [León, **fa 3**] **I 1/4 1/8**
20: Panthera tigris [Tigre, **mi 3**] **I 1/4**
19: Rhea americana [Avestruz, **re#3**] **I 1/8**
18: Lama glama [Llama, **re 3**] **I 1/4**
17: Phoca vitulina [Foca, **do#3**] **I 1/8**
16: Equus ferus caballus [Caballo, **do 3**] **I 1/4 1/8**
15: Camelus bactrianus [Camello, **si 2**] **I 2/4**
14: Odobenus rosmarus [Morsa, **la#2**] **I 1/8 1/16 1/32 1/64**
13: Gorilla [Gorila, **la 2**] **I 1/8 1/16**
12: Tursiops truncatus [Delfín, **sol#2**] **I 1/16 1/32 1/64**
11: Bos primigenius taurus [Vaca, **sol 2**] **I 1/8 1/16**
10: Bos primigenius taurus [Toro, **fa#2**] **I 1/4**
9: Bos primigenius taurus [Buey, **fa 2**] **I 1/4 1/8**
8: Ursus arctos arctos [Oso, **mi 2**] **I 1/8 1/16 1/32**
7: Otaria flavescens [Lobo Marino, **re#2**] **I 1/8**
6: Bos primigenius indicus [Cebuino, **re 2**] **I 1/4**
5: Bison bison [Búfalo, **do#2**] **I 1/4**
4: Selachimorph [Tiburón, **do 2**] **I 3/4**
3: Giraffa camelopardalis [Girafa, **si 1**] **I 1/4**
2: Loxodonta africana [Elefante, **la#1**] **I 3/4**
1: Balaena mysticetus [Ballena, **la 1**] **I 3/4**

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

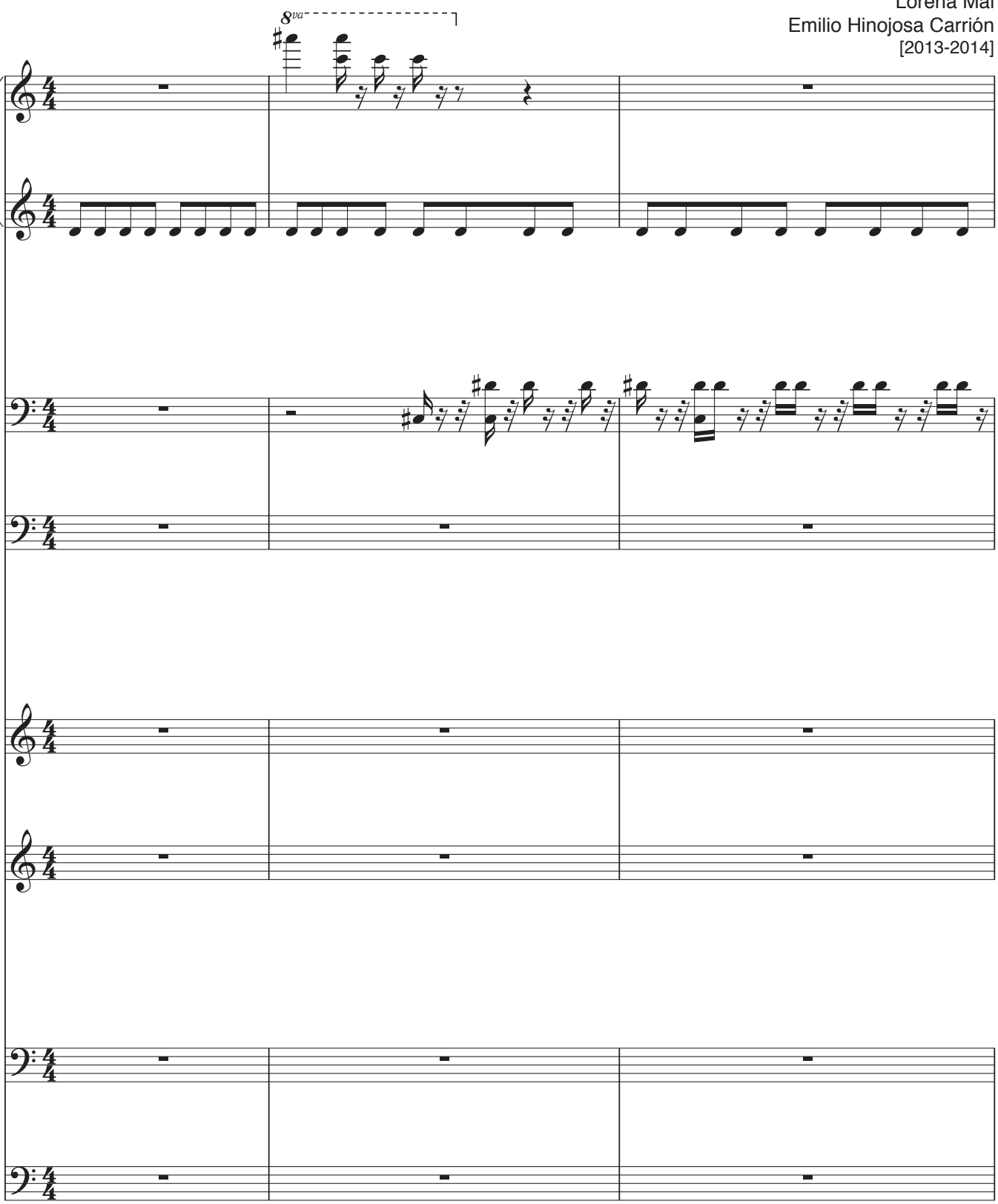
Sincronía

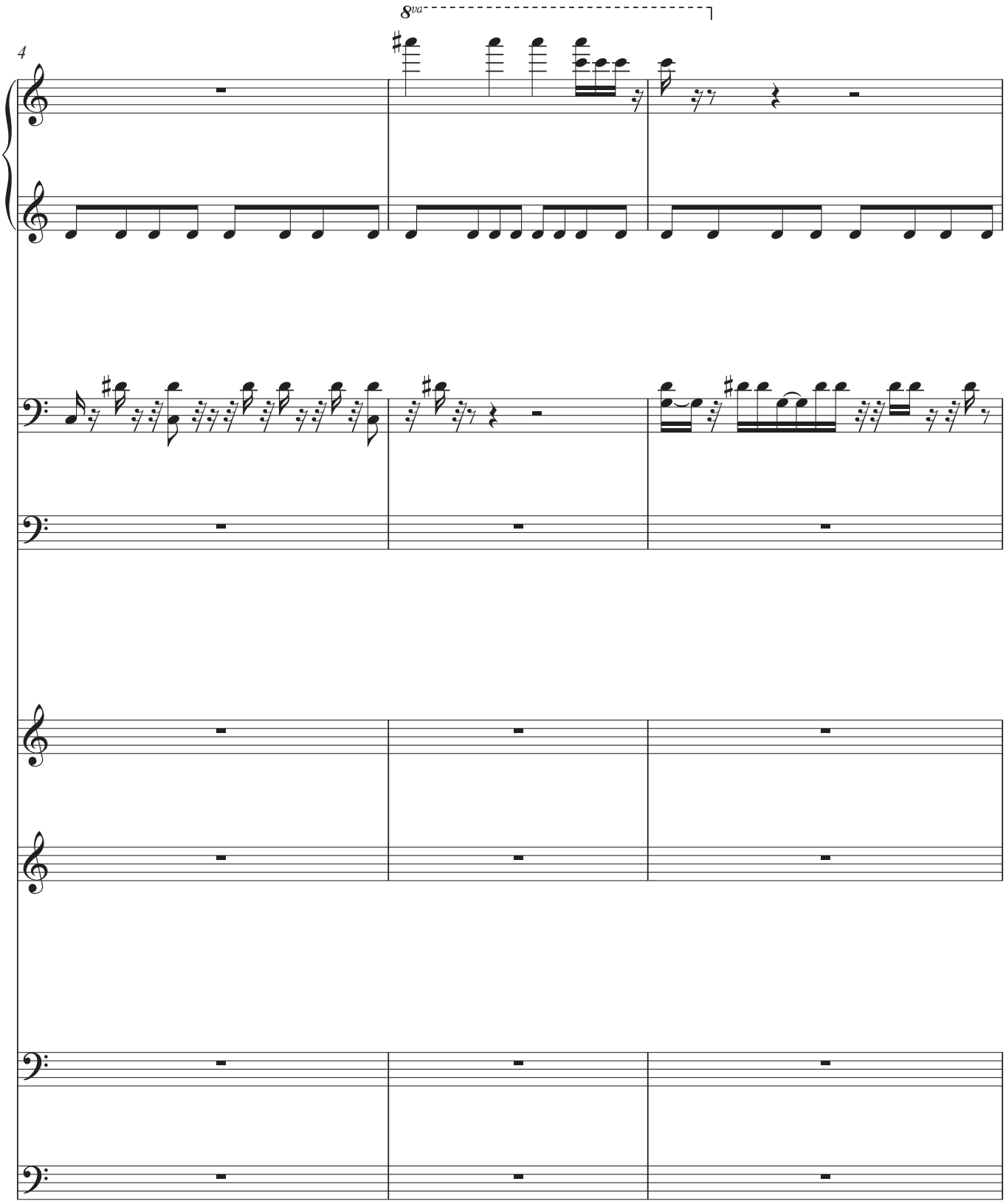
Movimiento no.1-A: 'Estado físico en calma ó Andante'

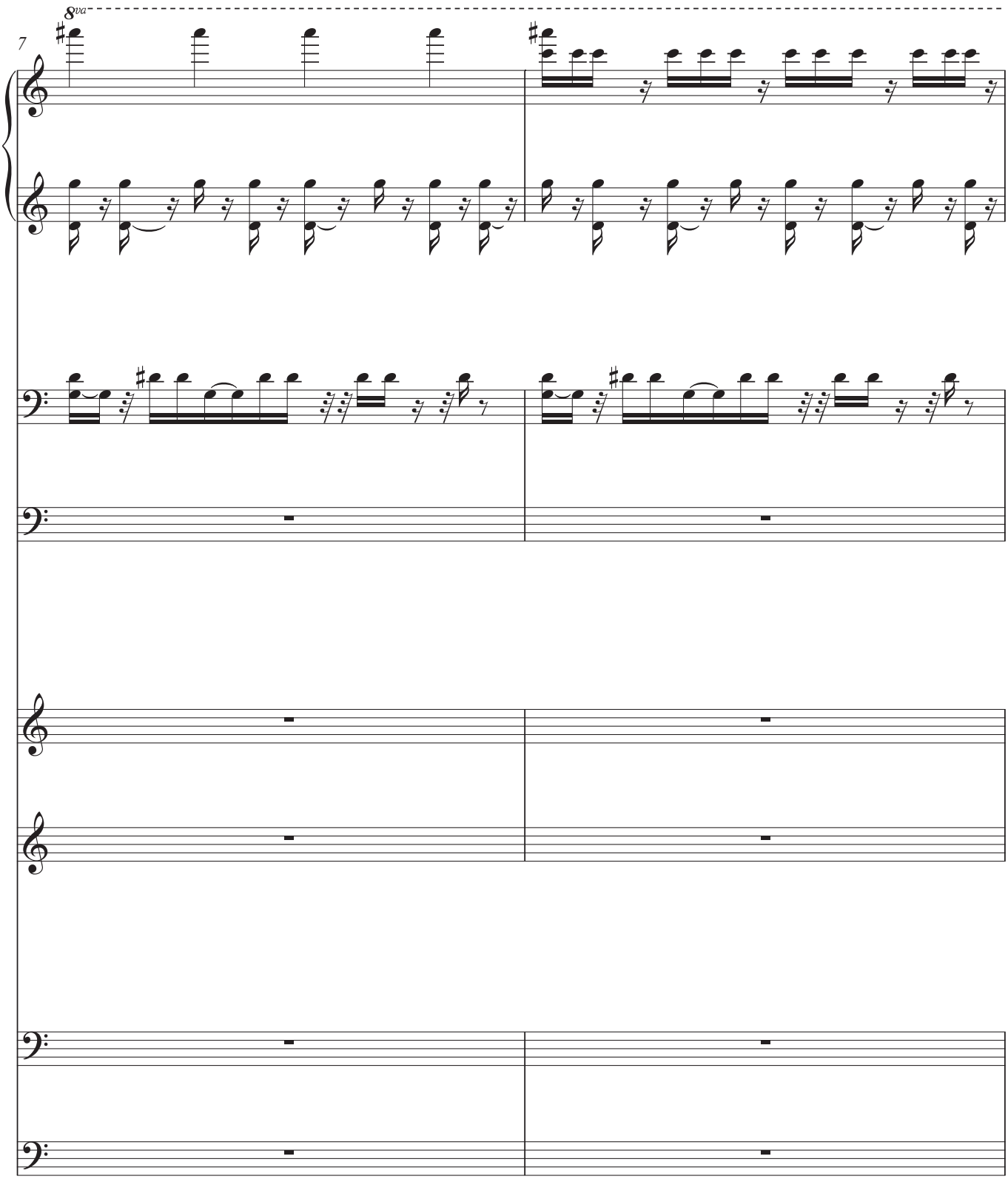
Estado rítmico cardiaco en calma de 88 especies animales

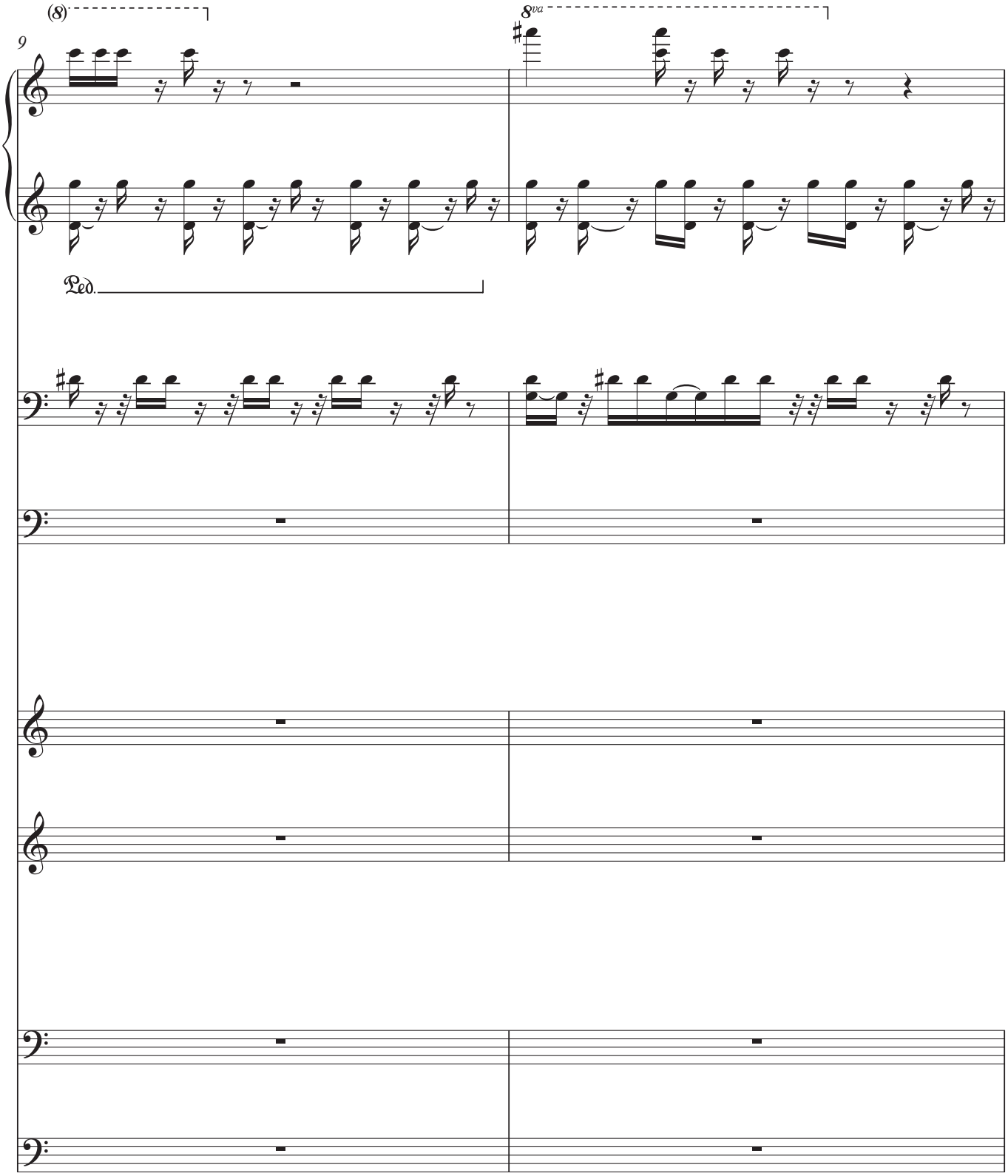
♩ - 60

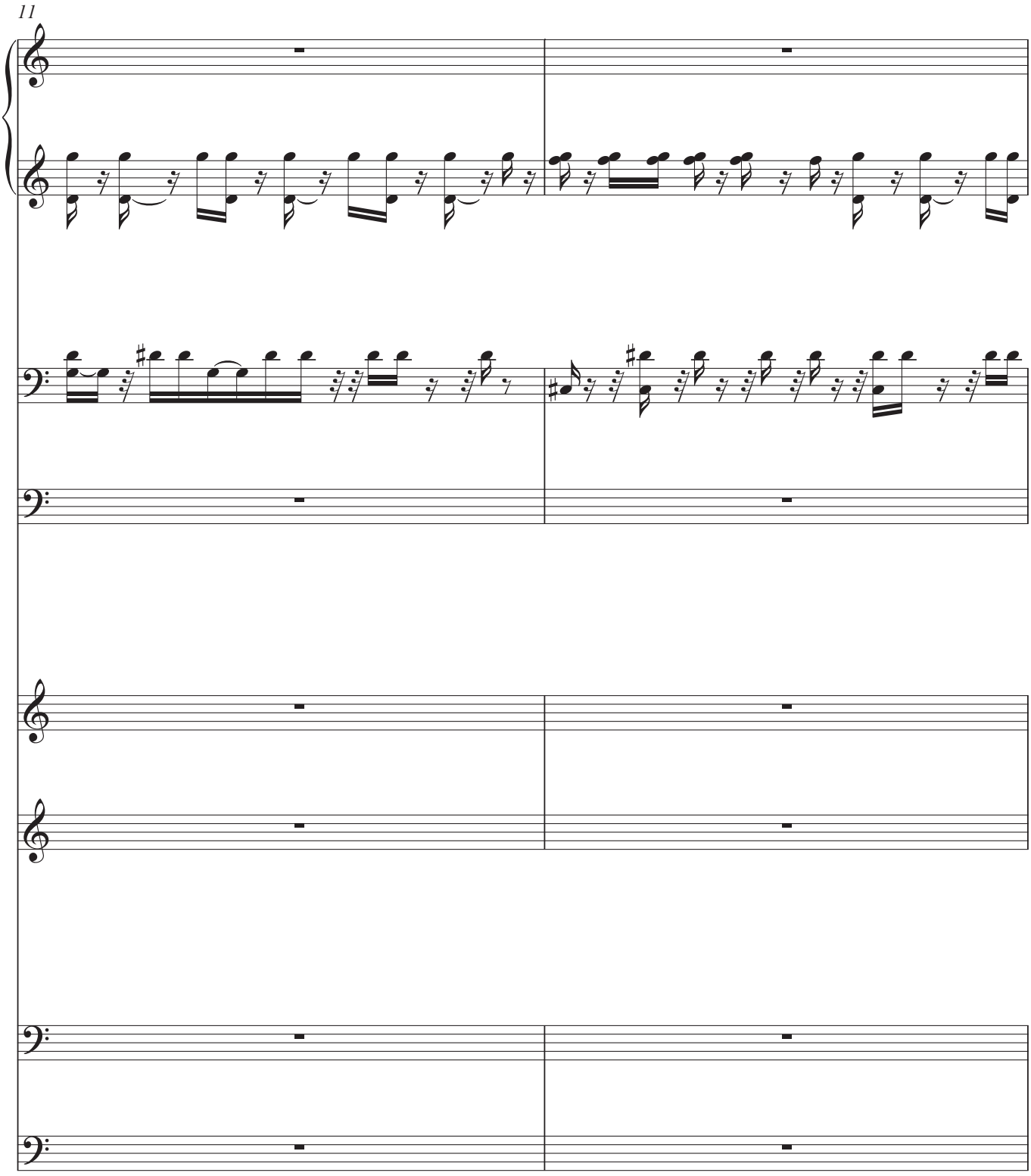
Lorena Mal
Emilio Hinojosa Carrión
[2013-2014]

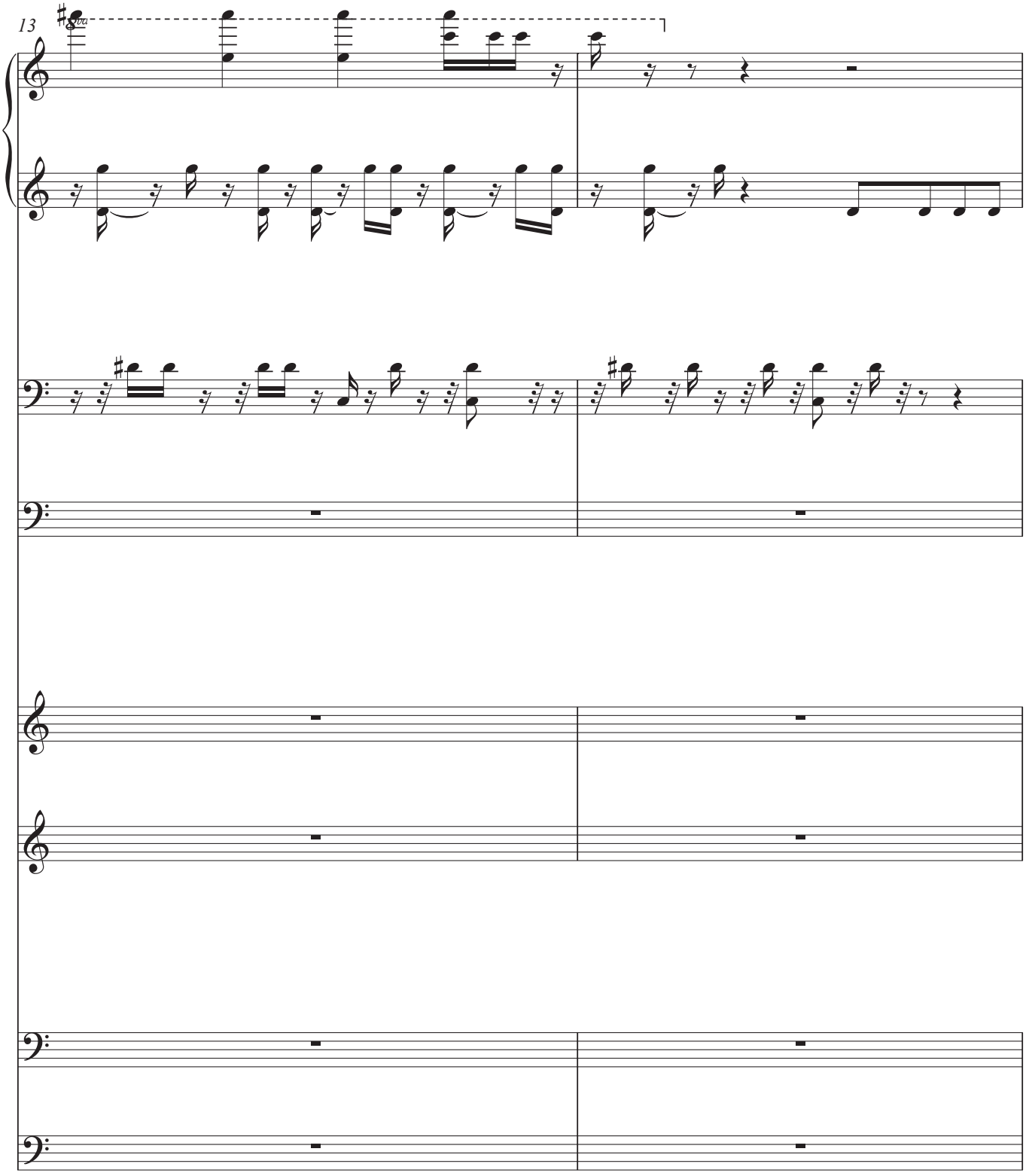


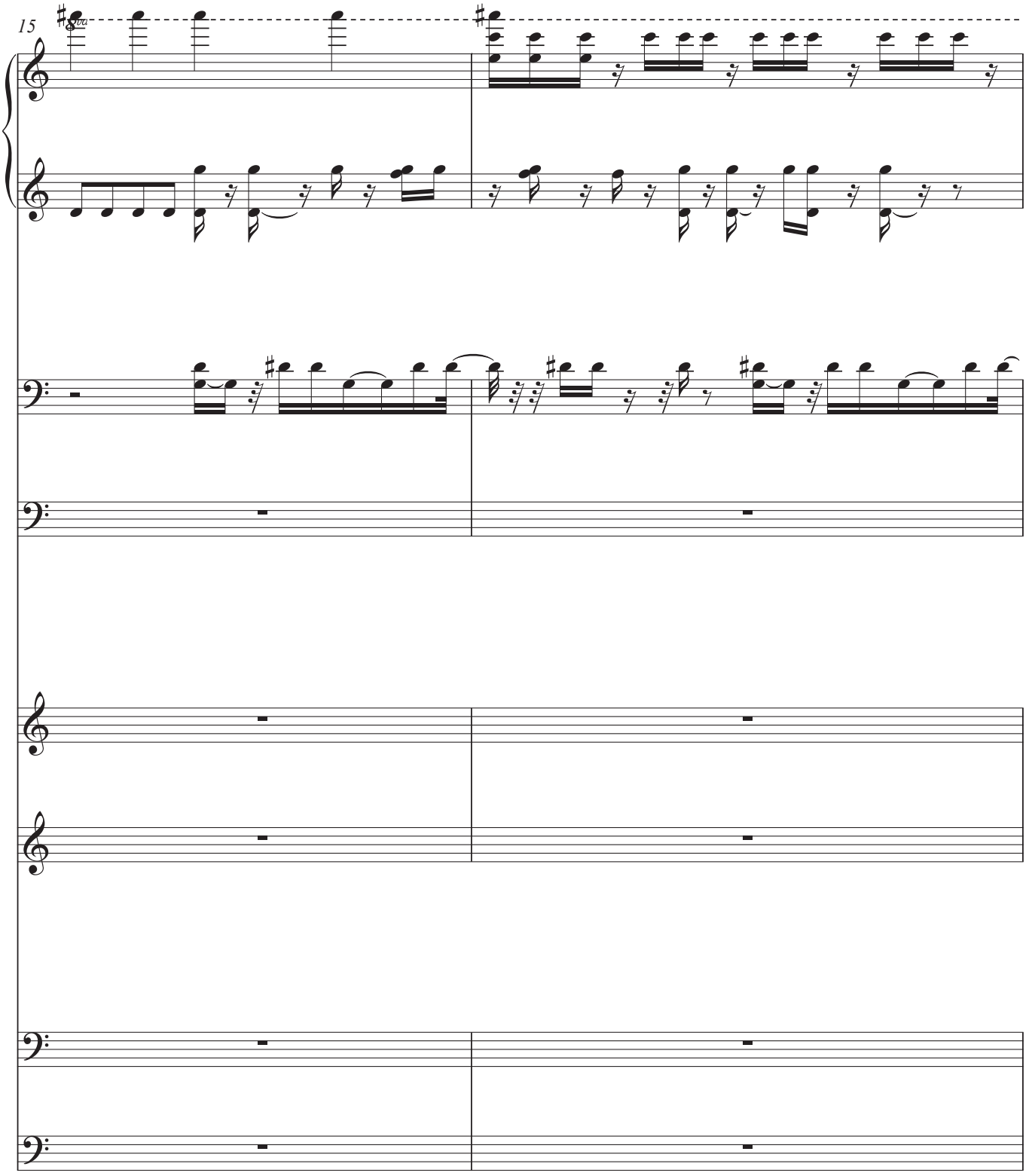

8va
4

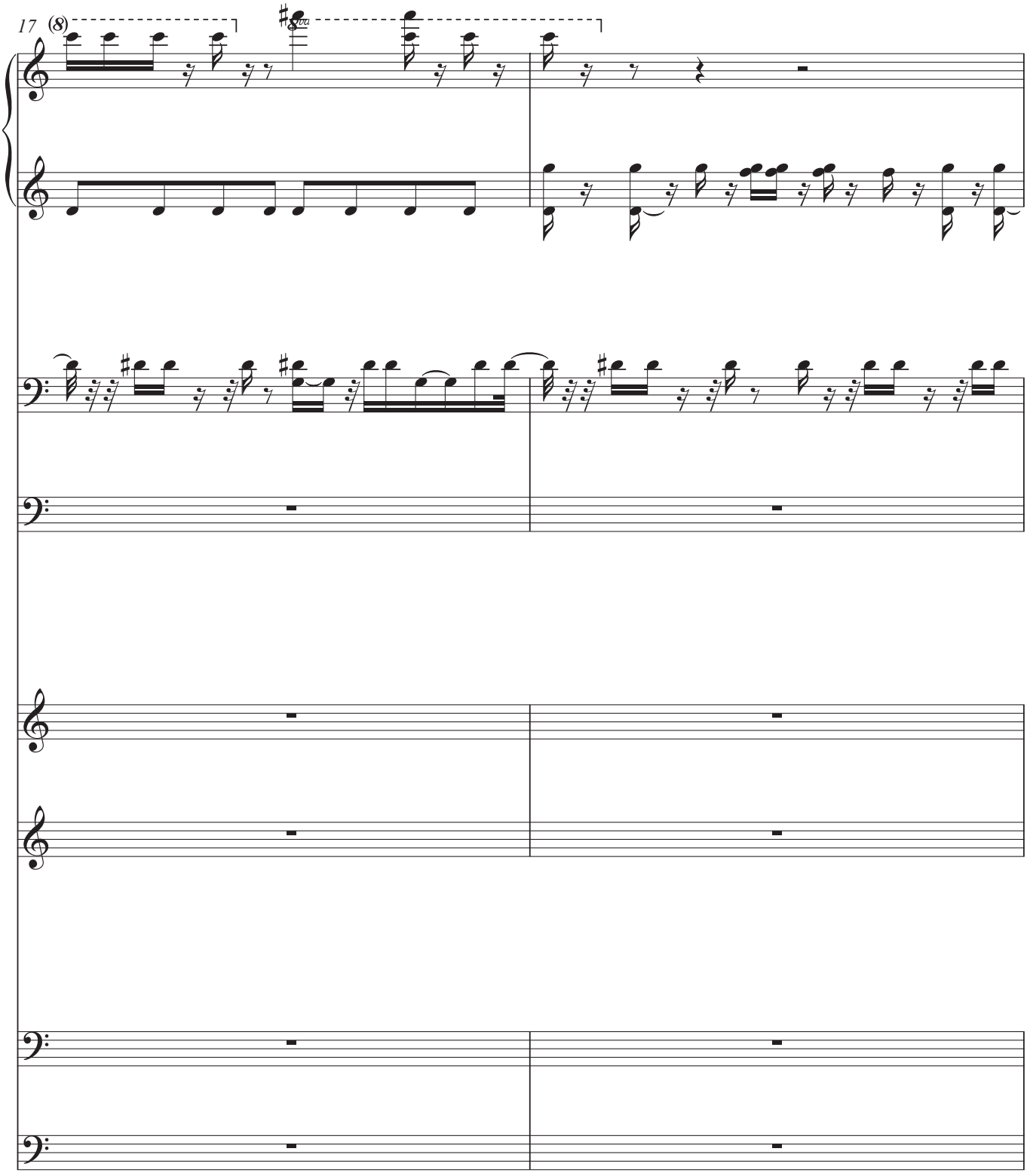

8va
7

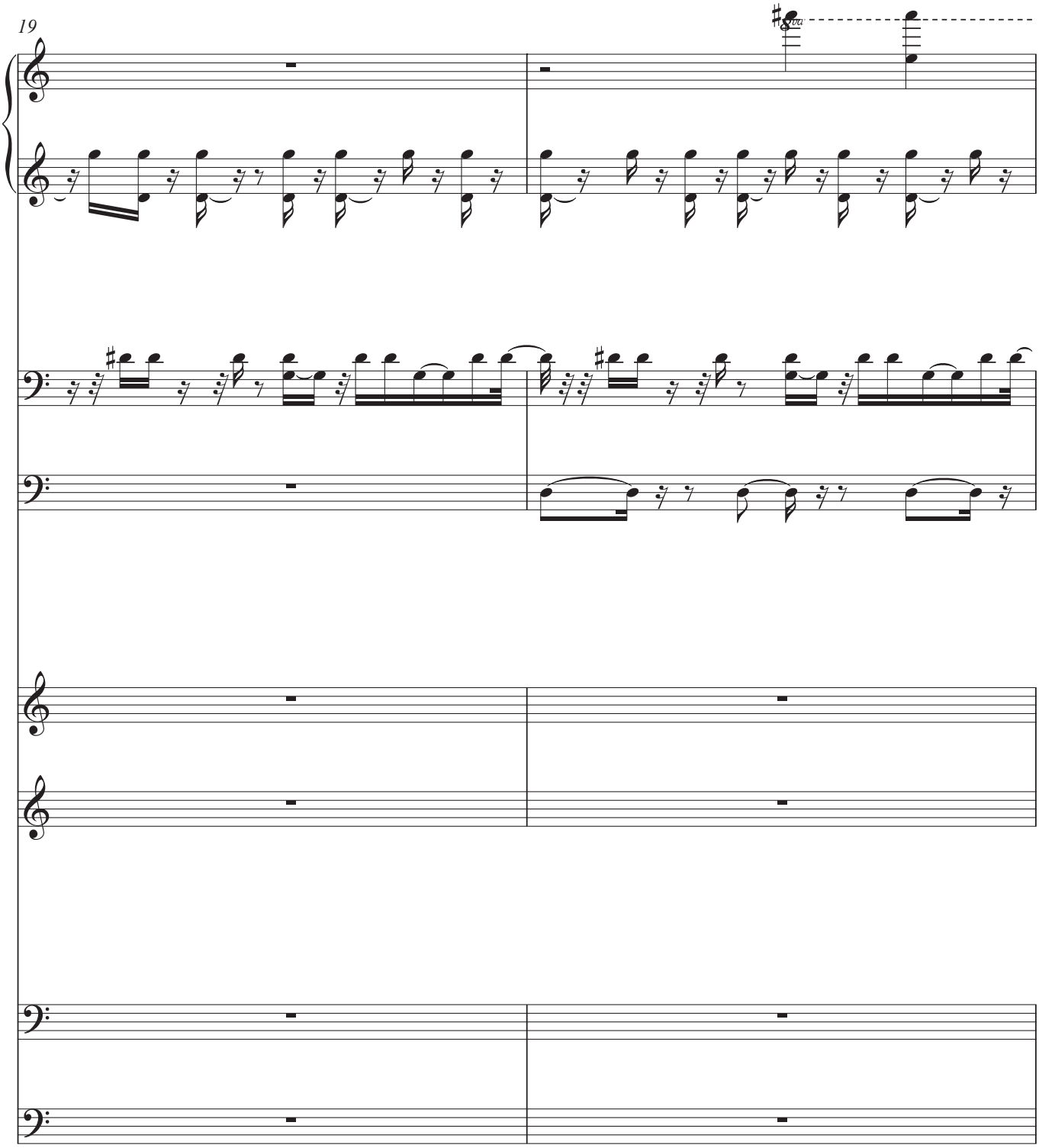

(8)
8va
9
Ped.

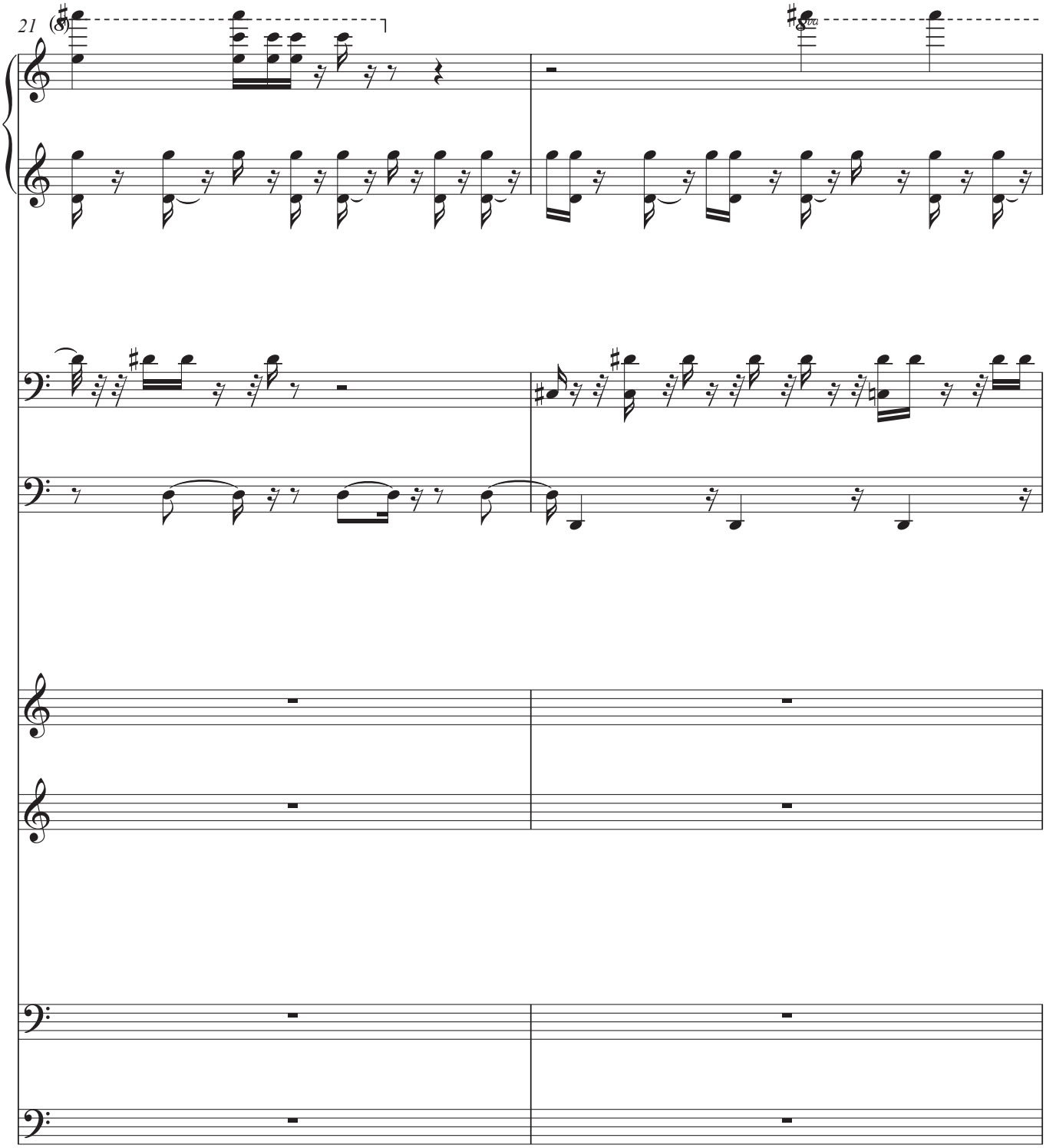

11

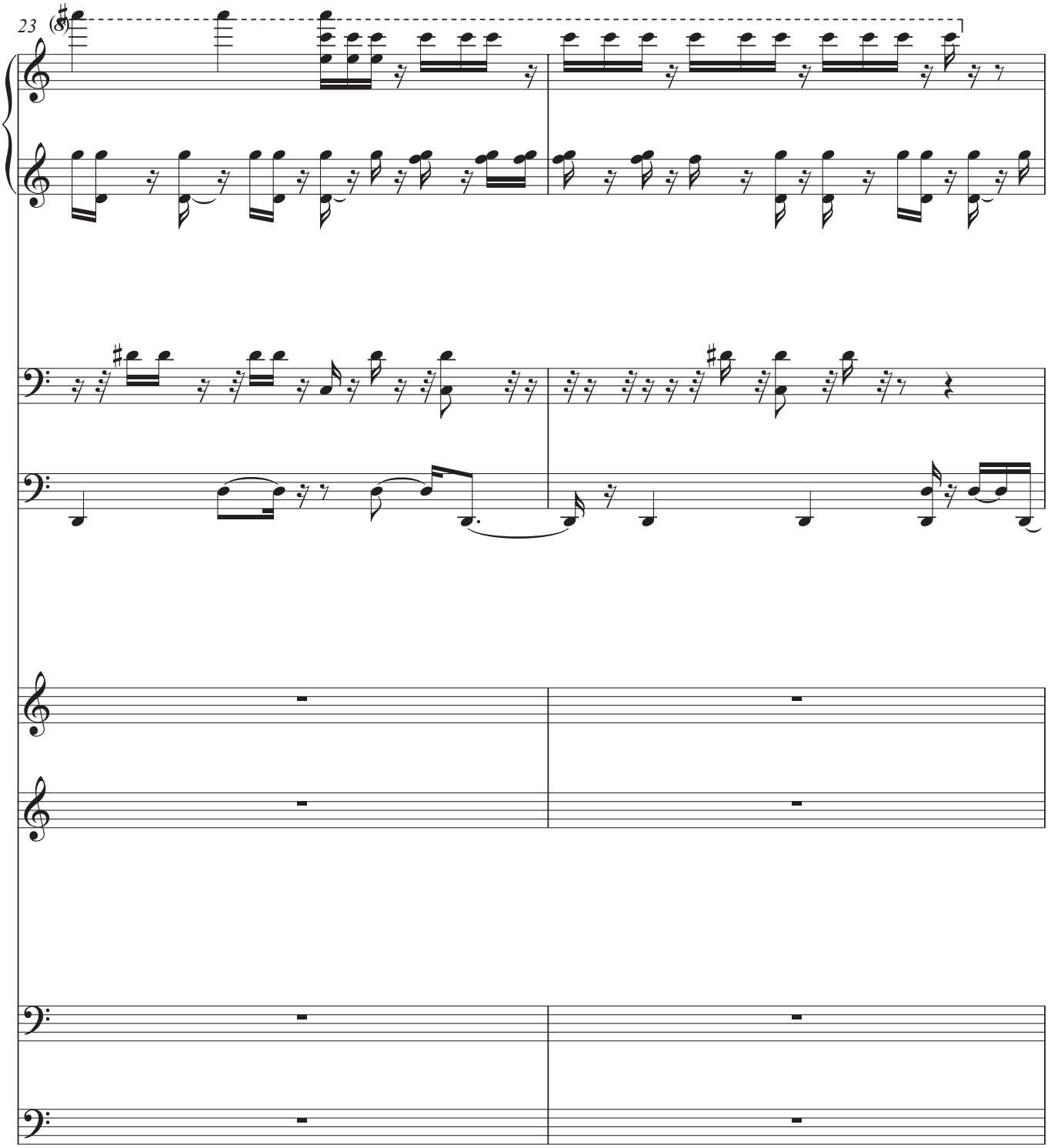

13
8va

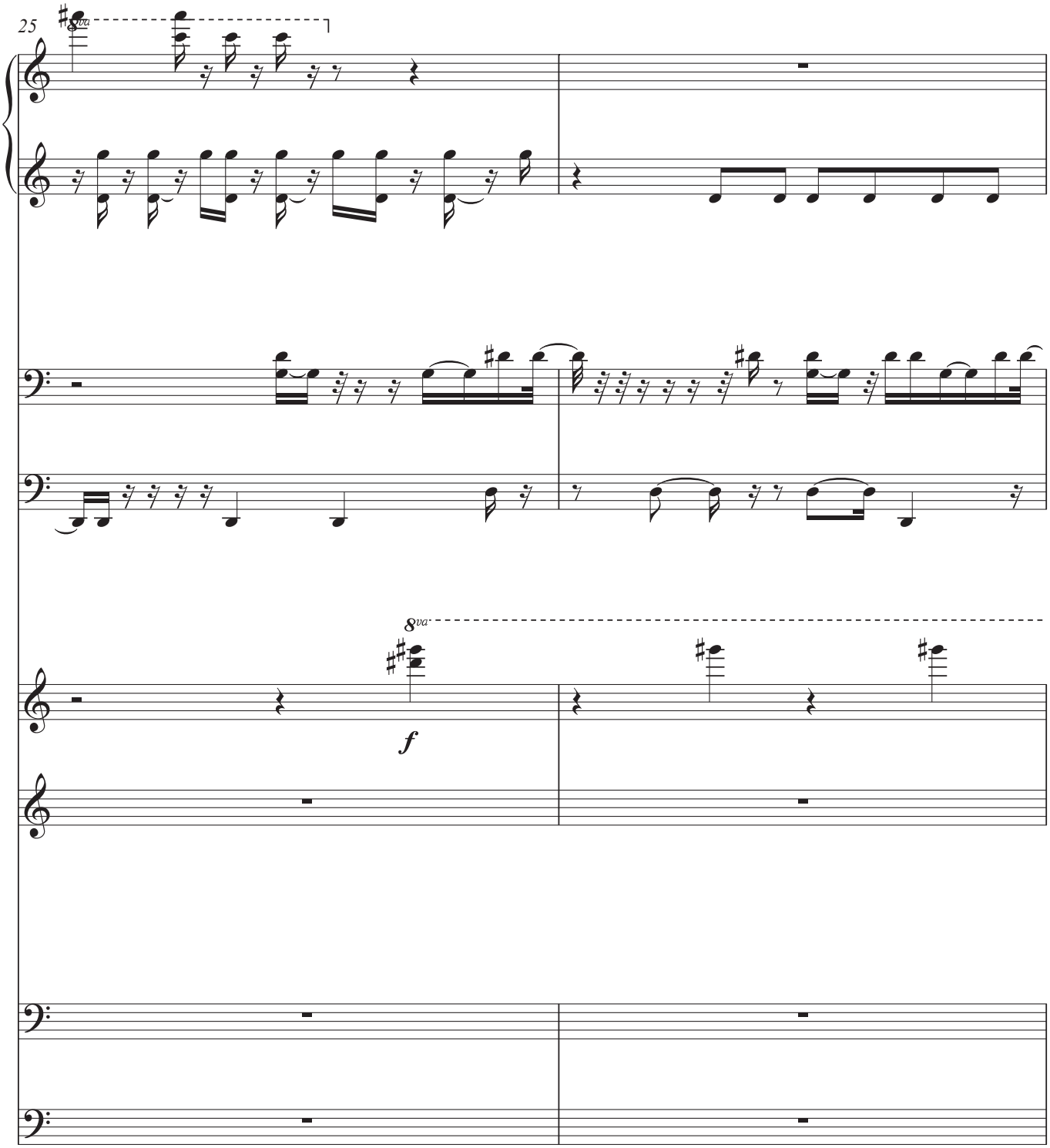

15
8va

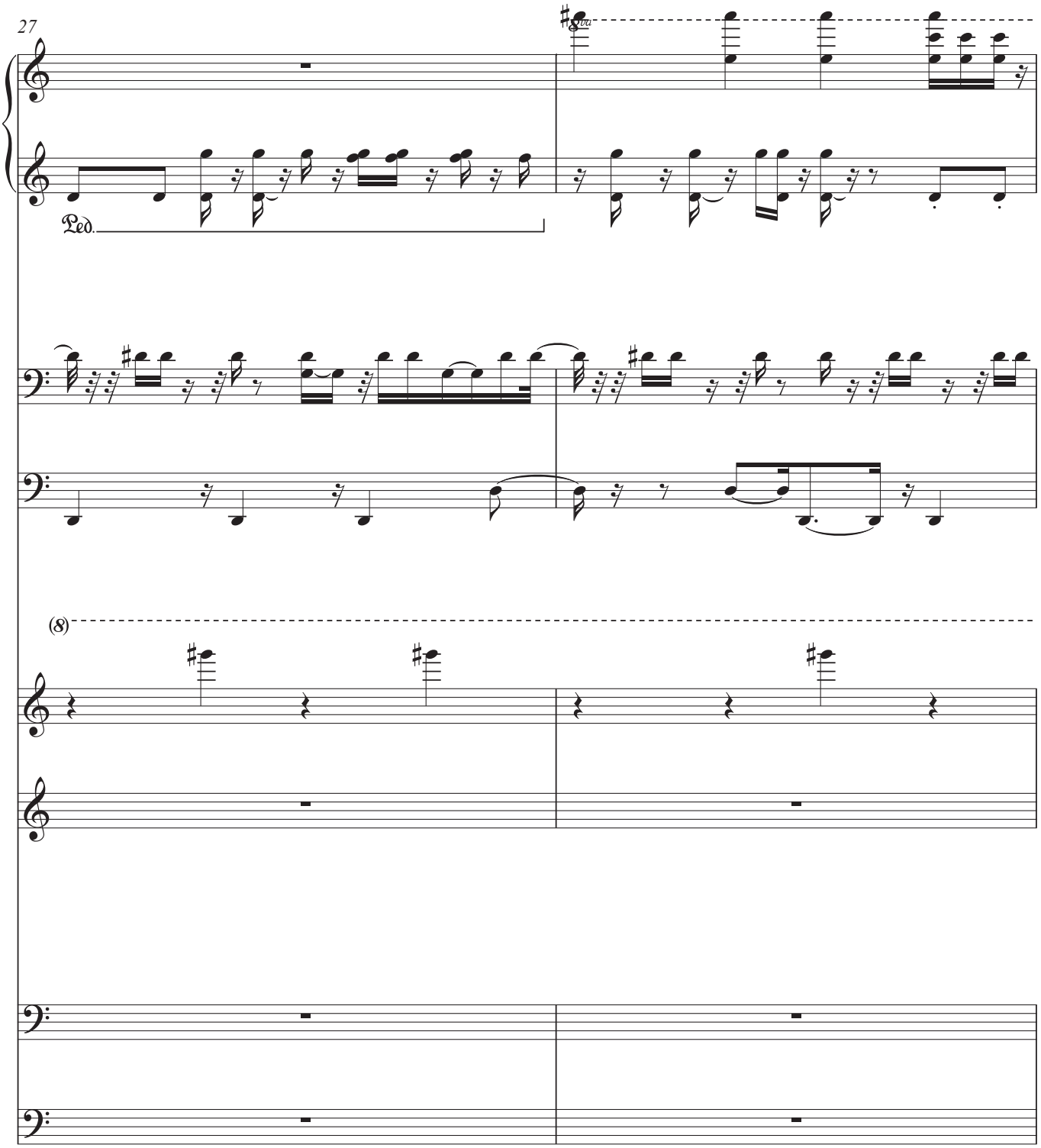

17
(8)

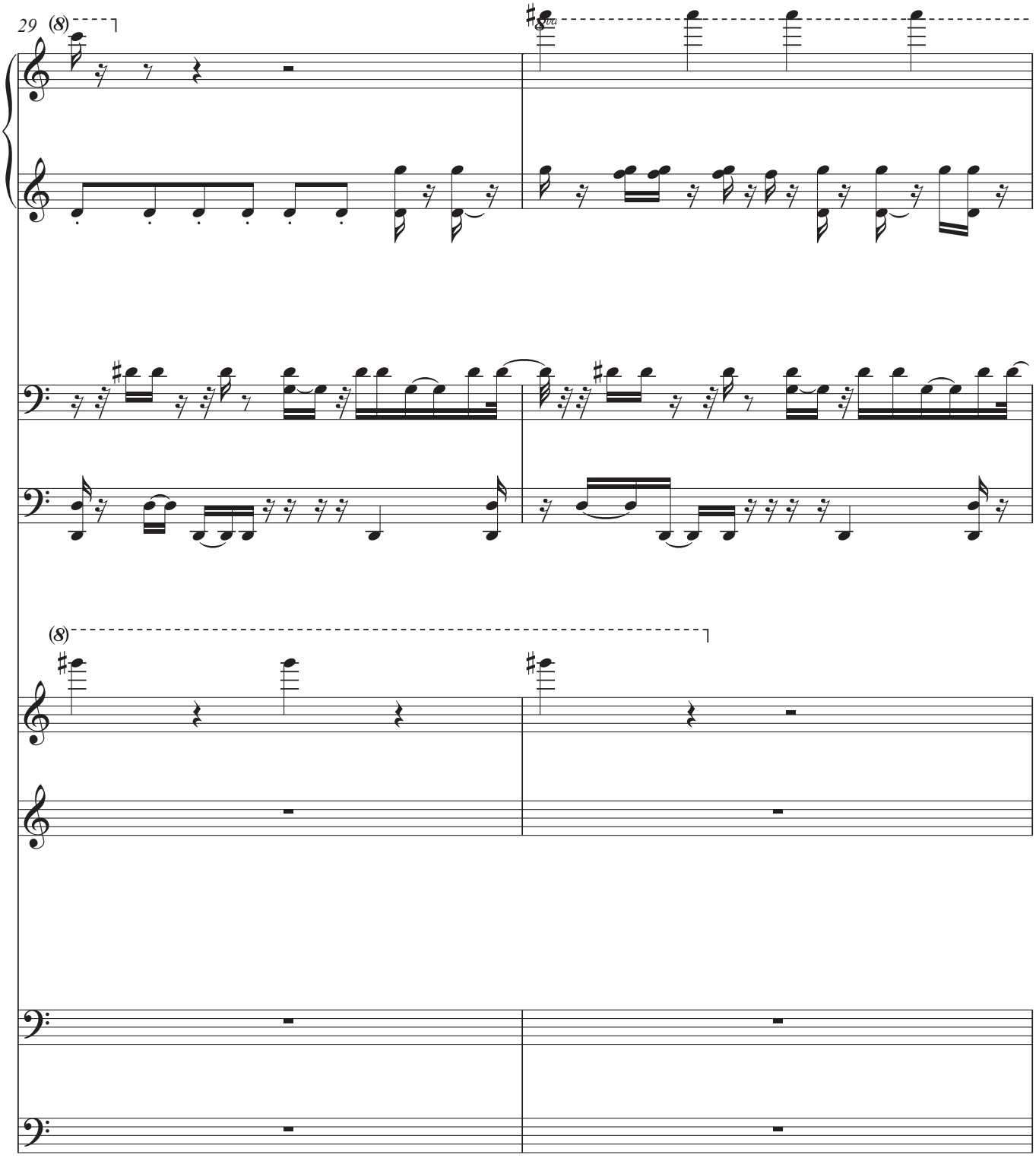

19
8va

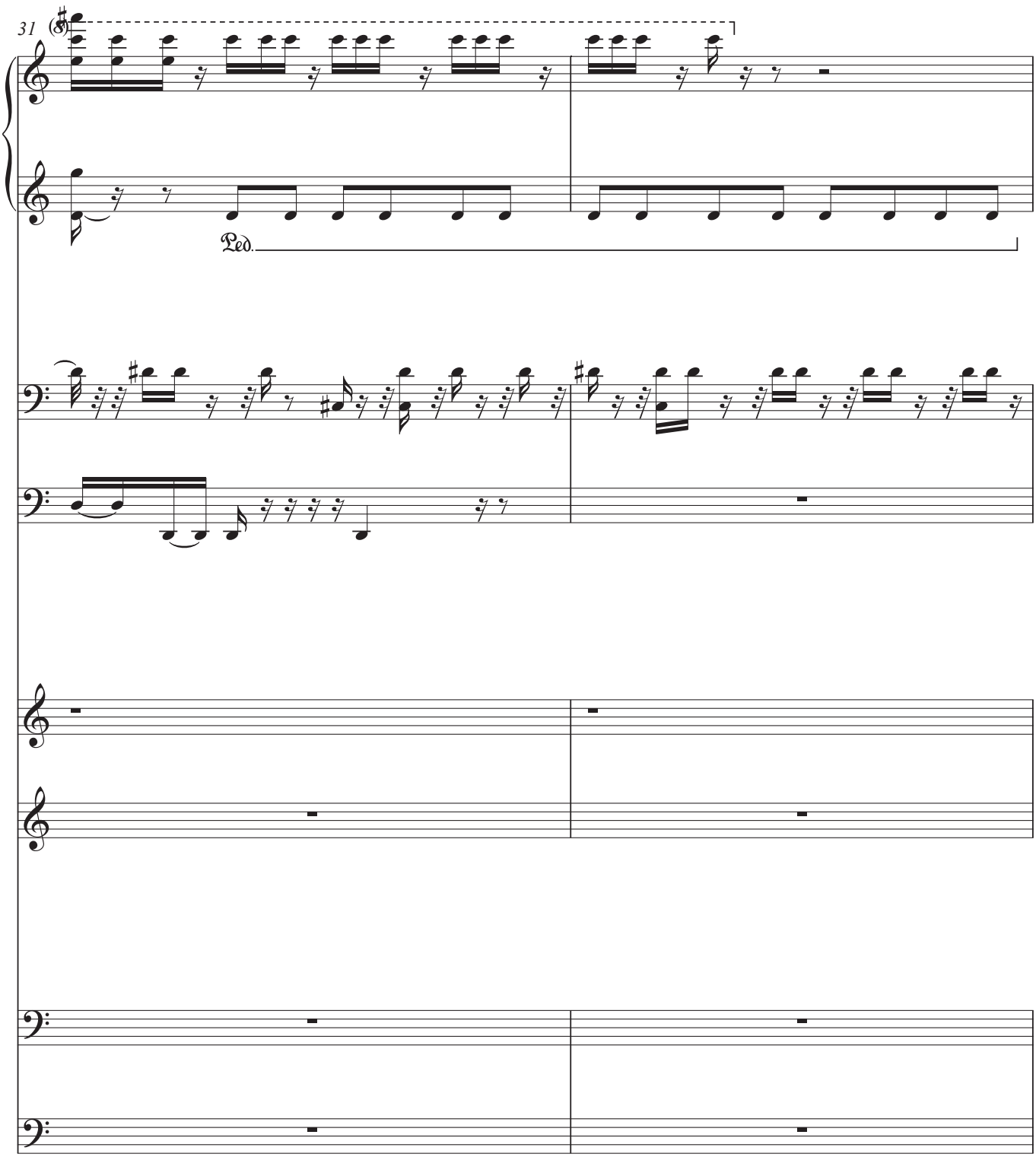

21

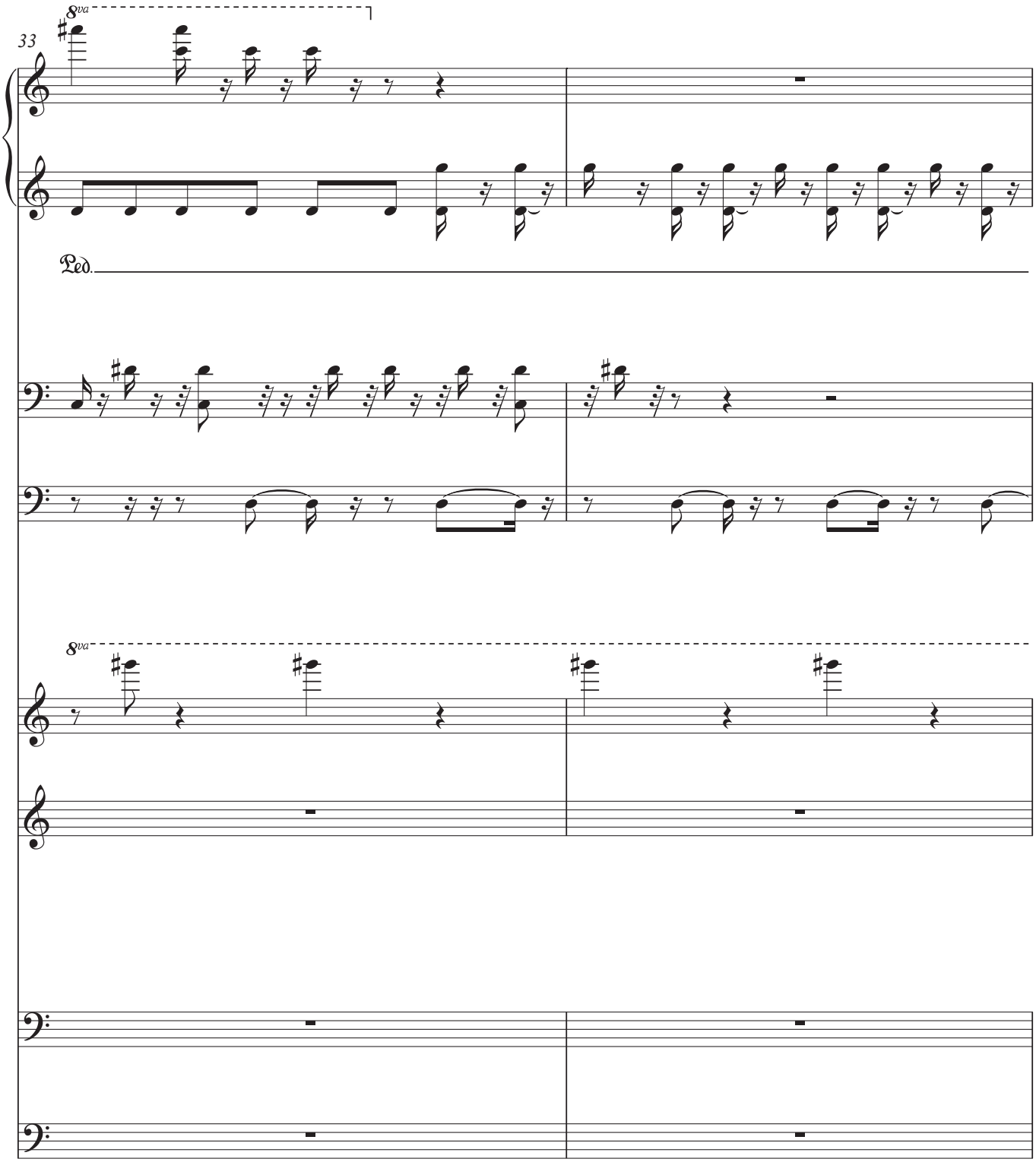

23

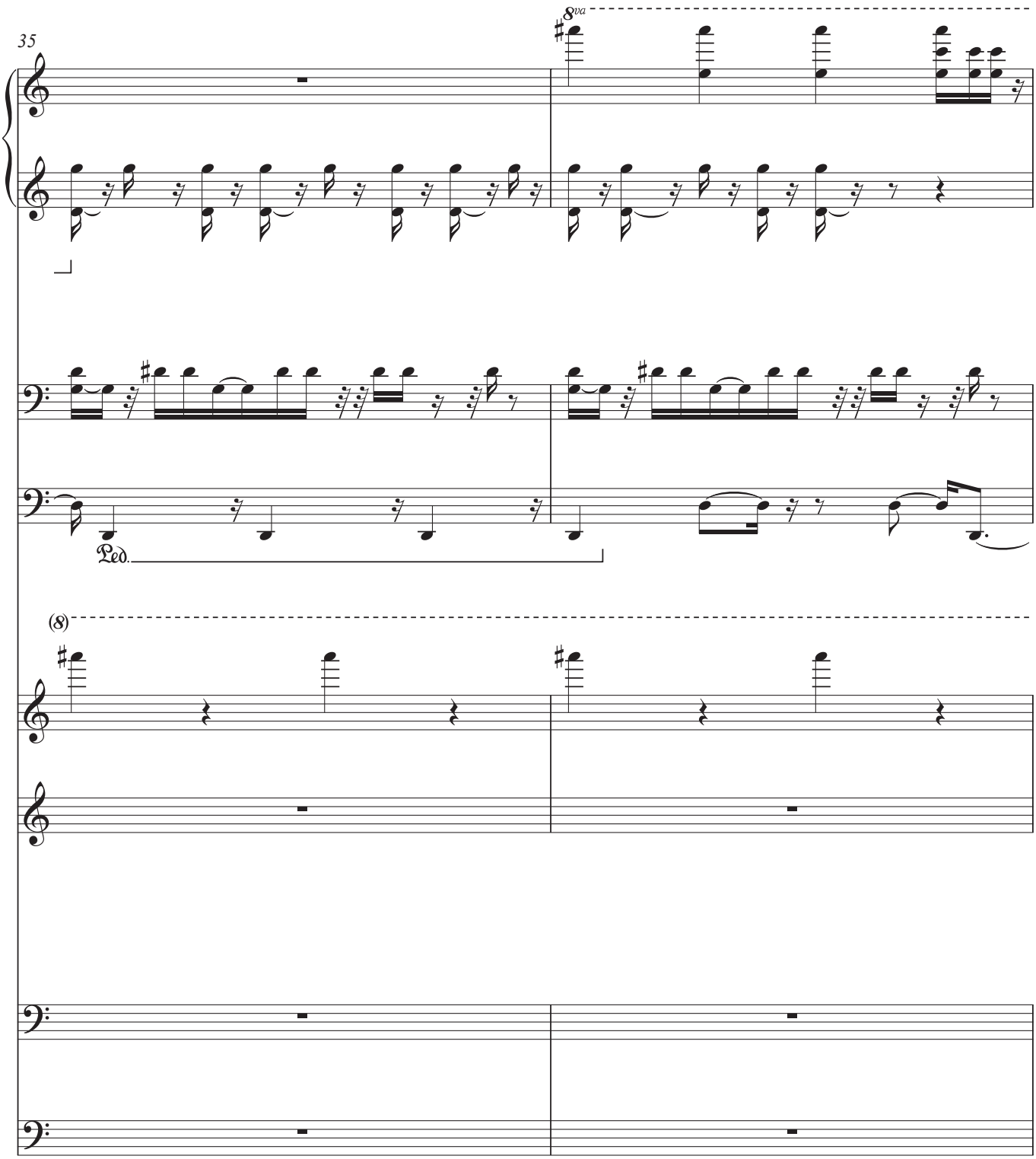

25
8va
8va
f

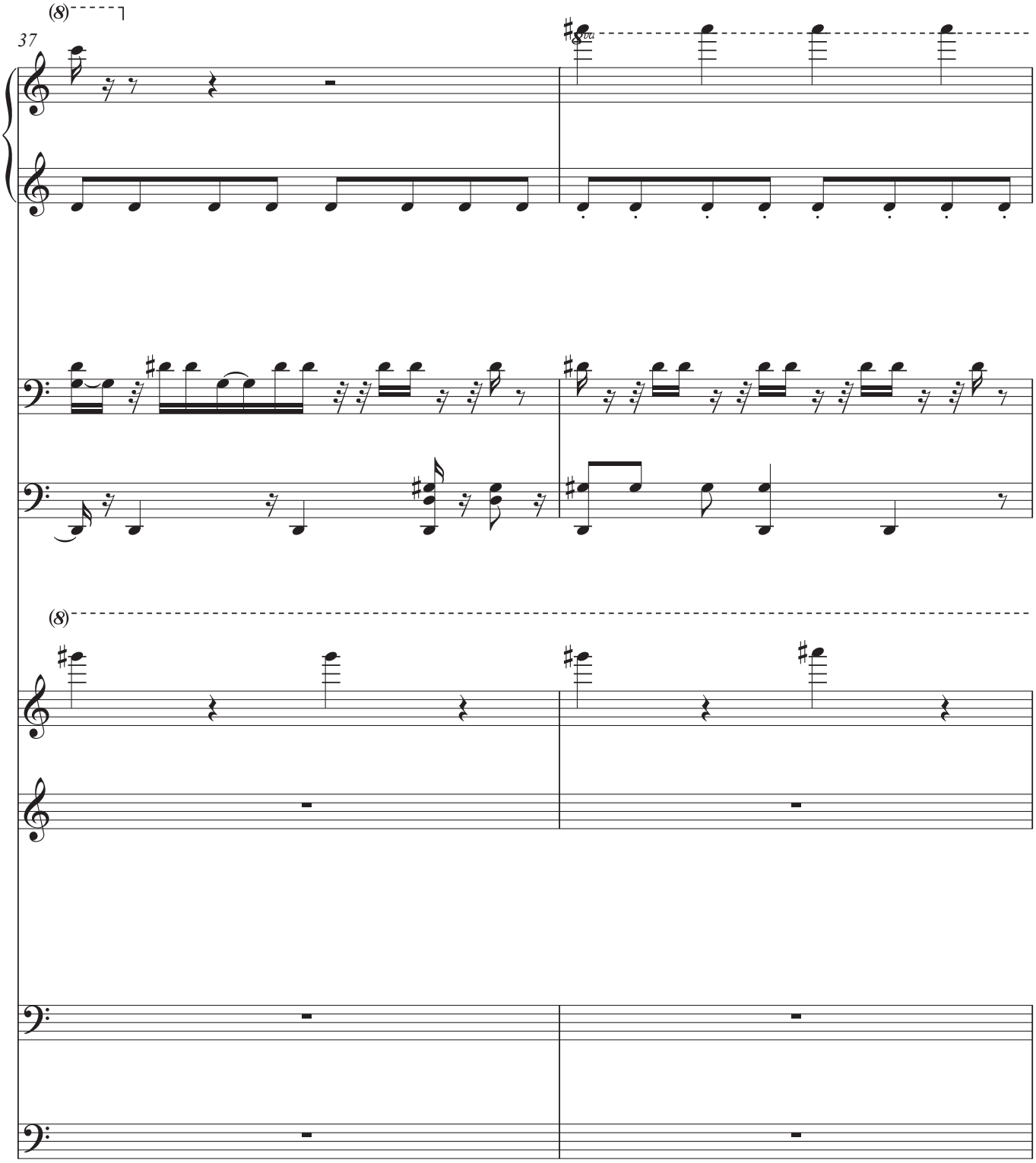

27
8va
Ped.
(8)

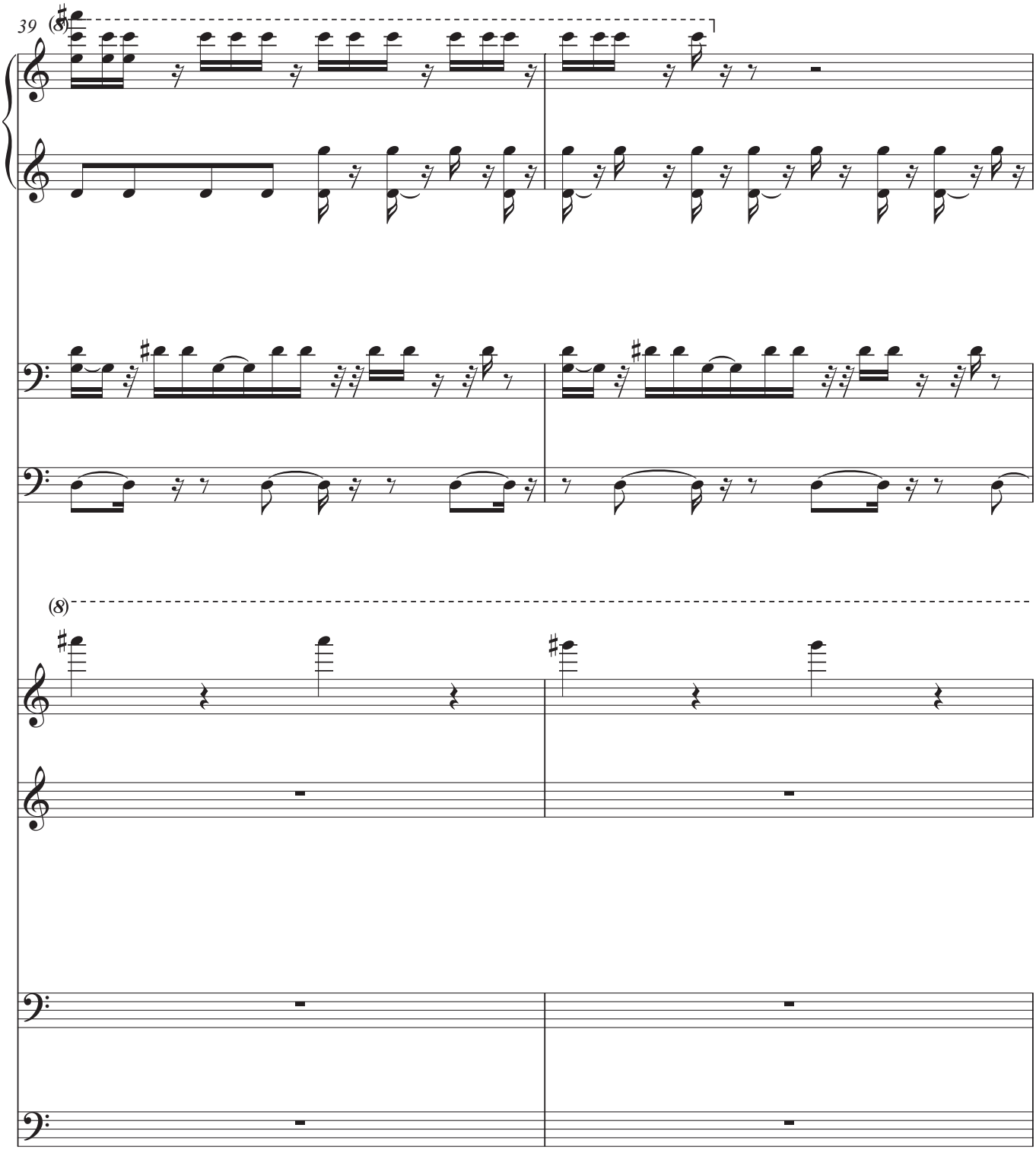

29
(8)
8va
(8)

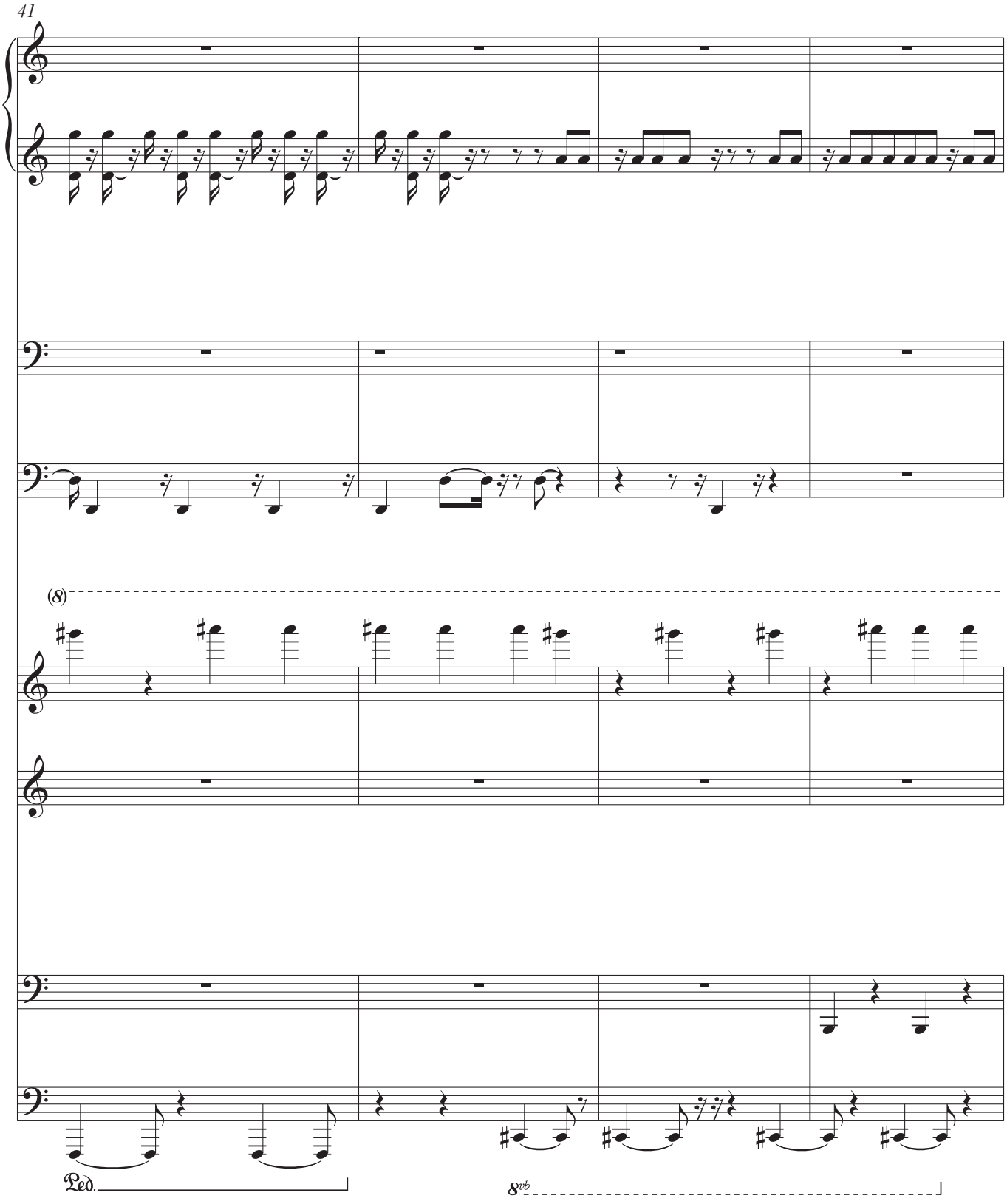

31
Ped.

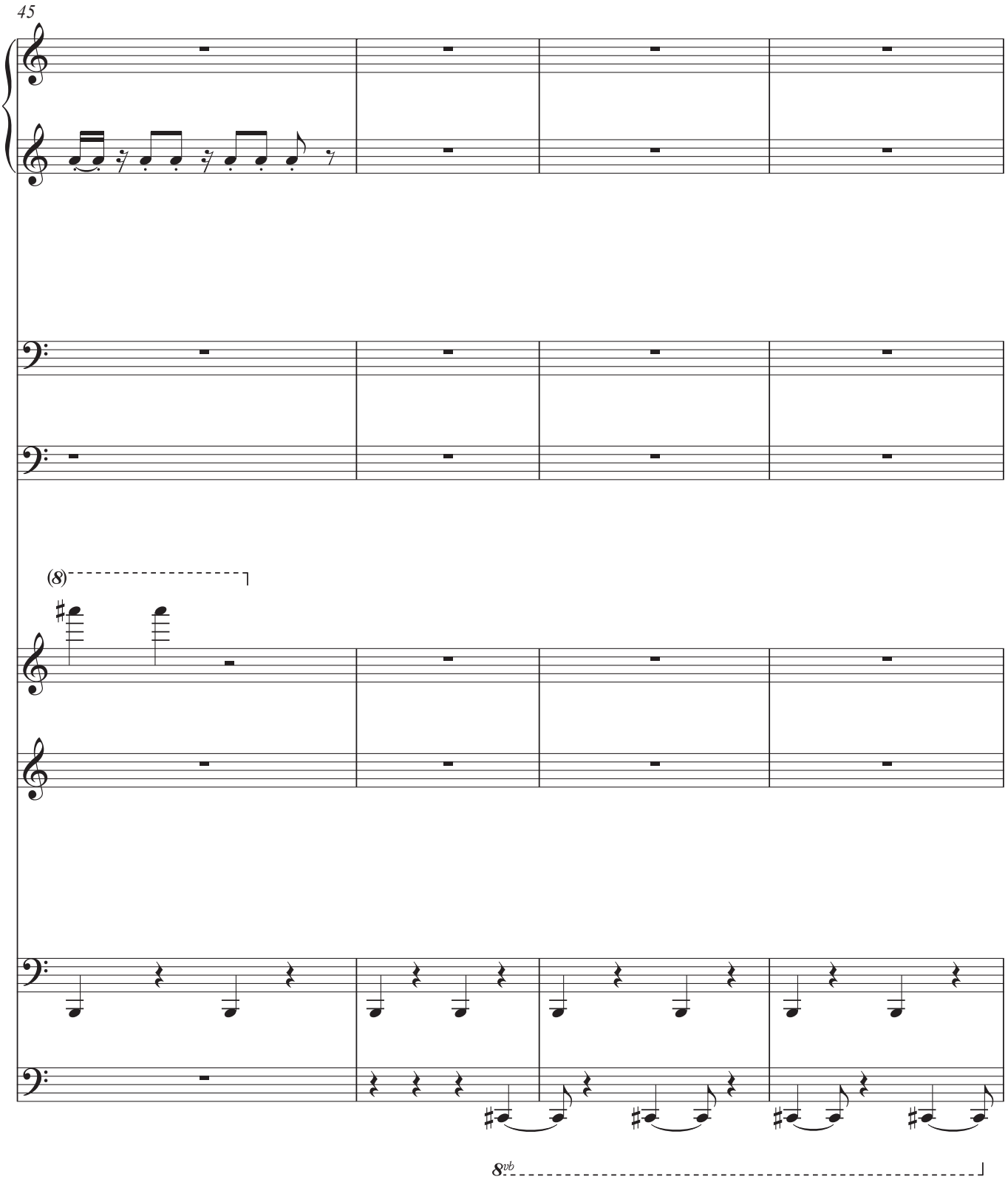

8va
33
Ped.
8va

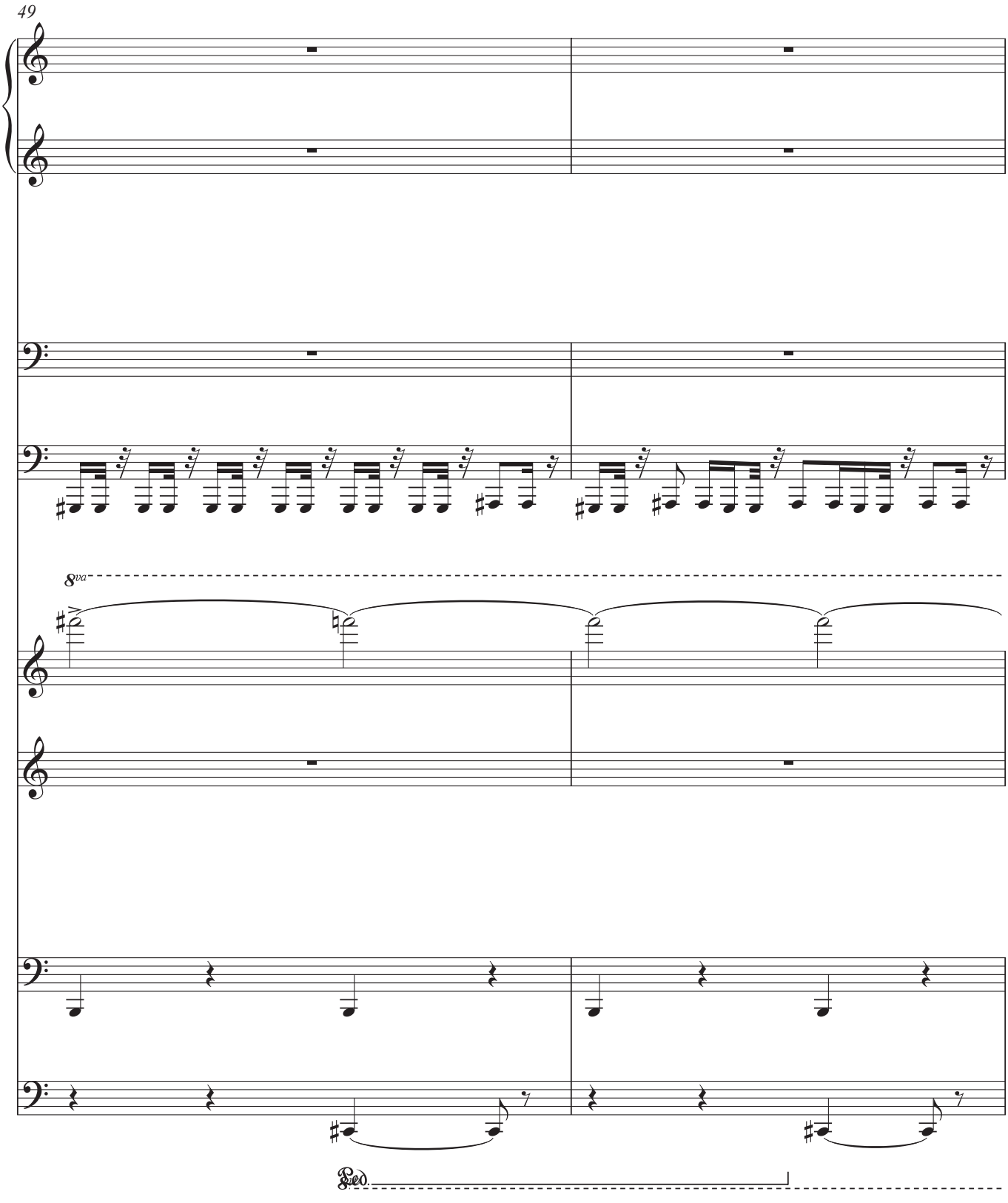

35
8va
Ped.
(8)

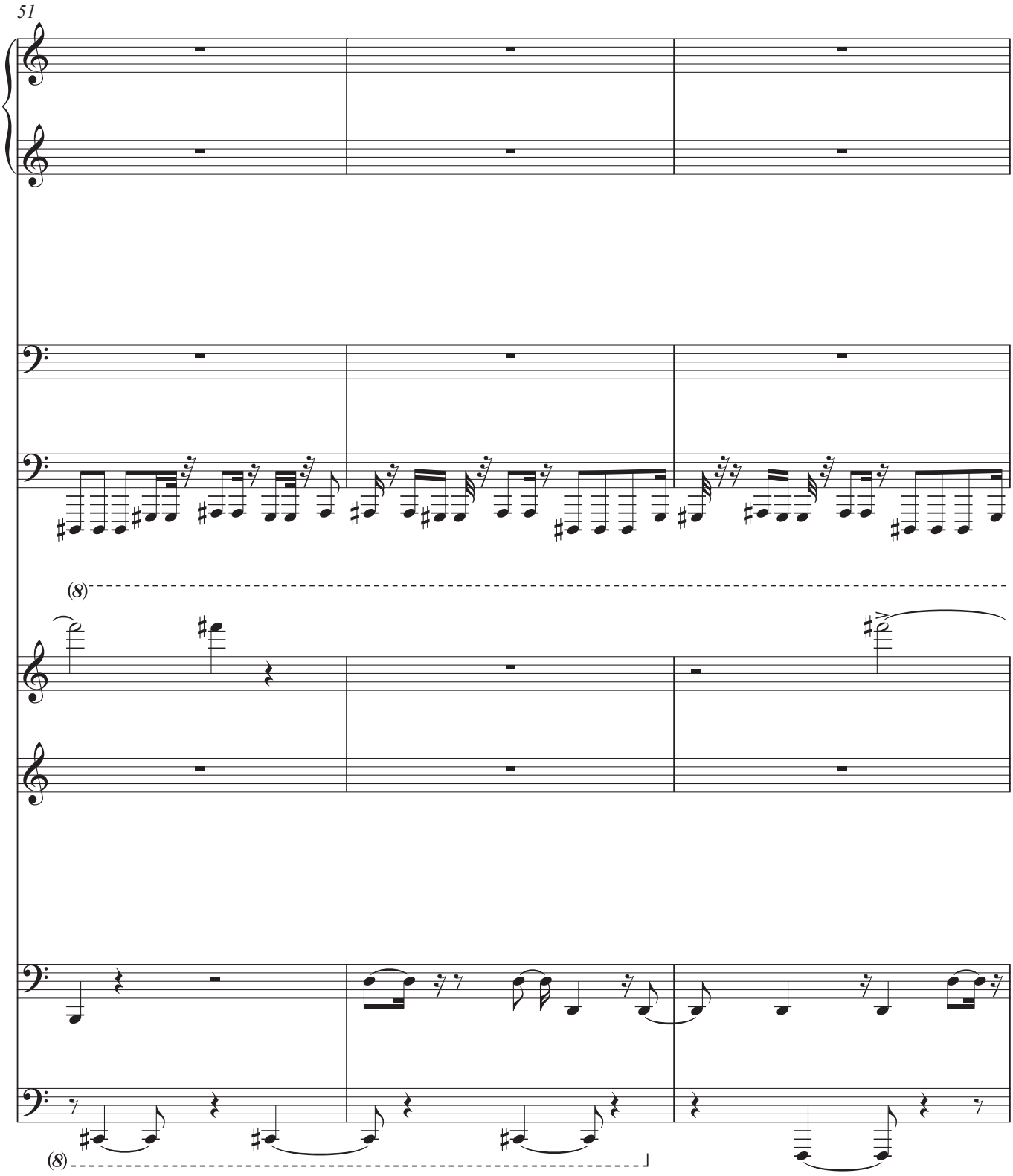

(8)
37
8va
(8)

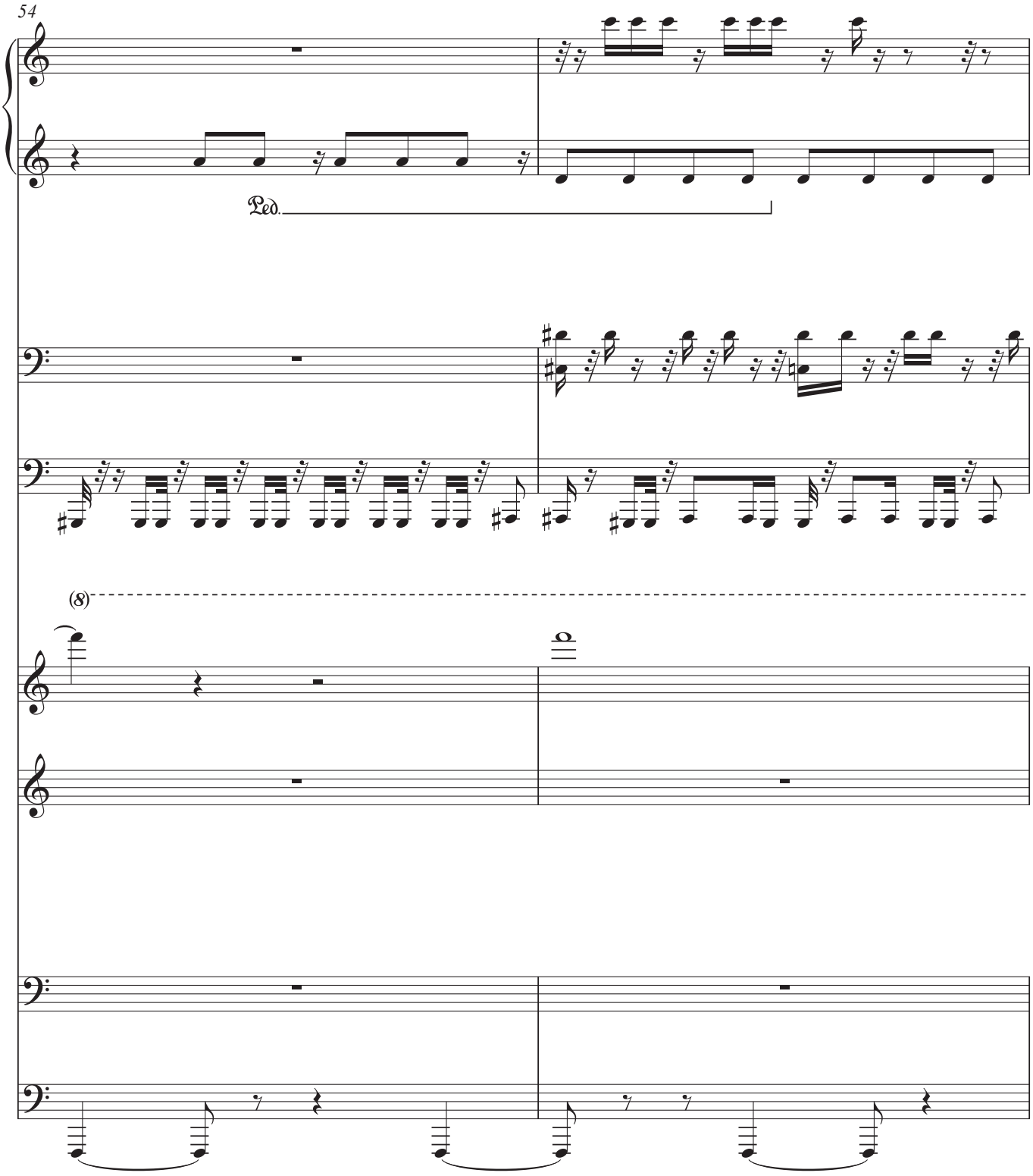

39
(8)
(8)

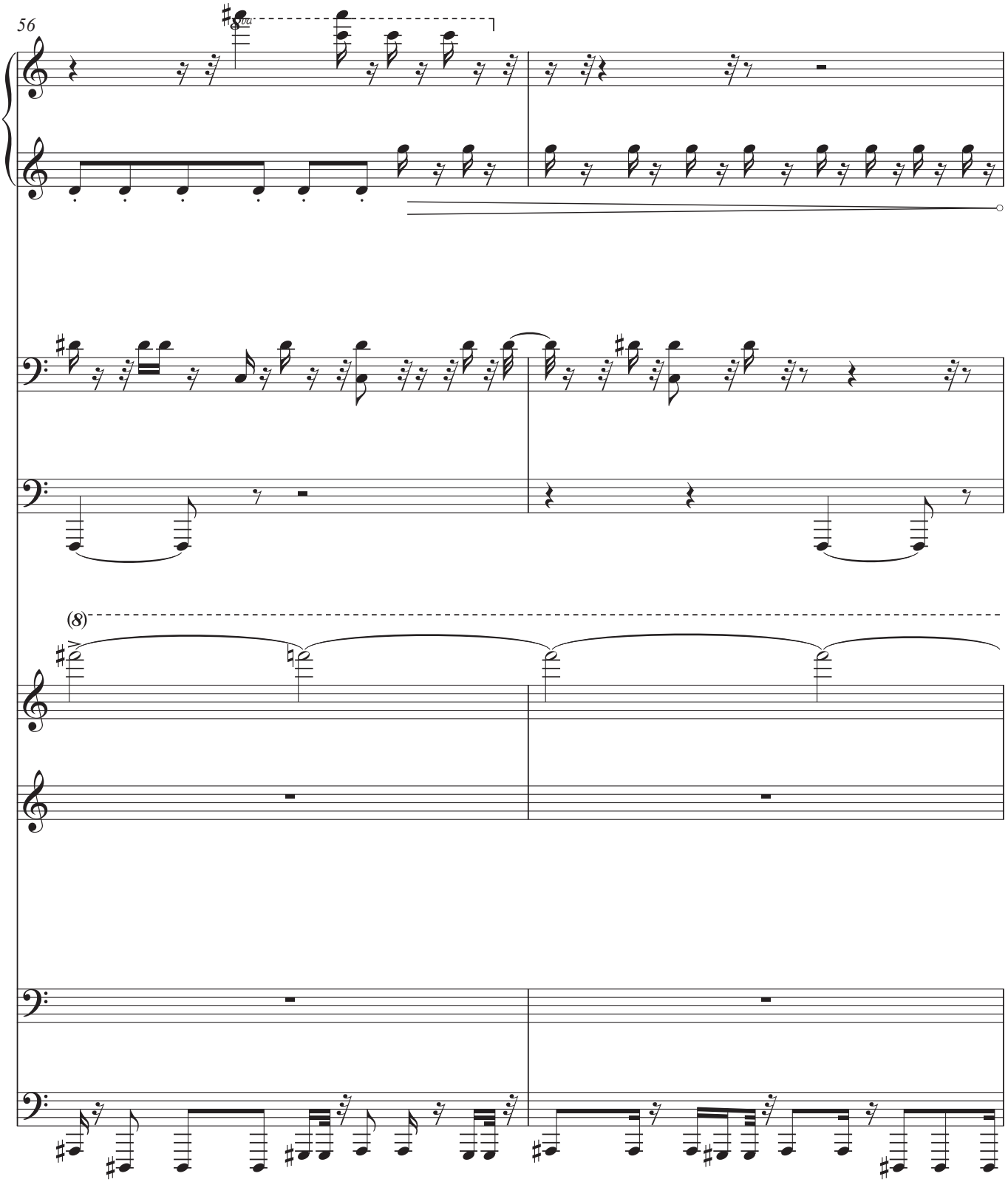

41
(8)
Ped.
8vb

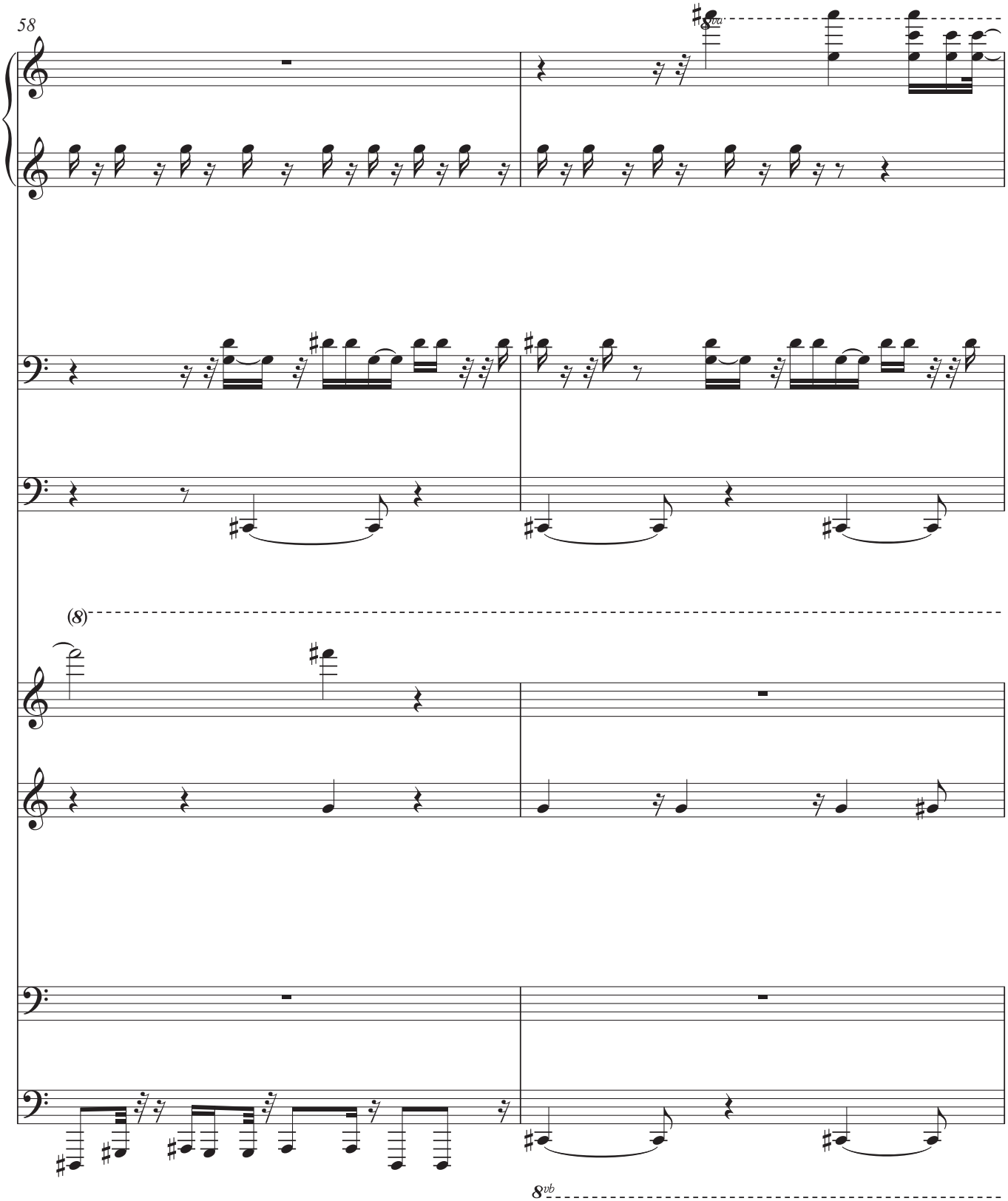

45
(8)
8vb

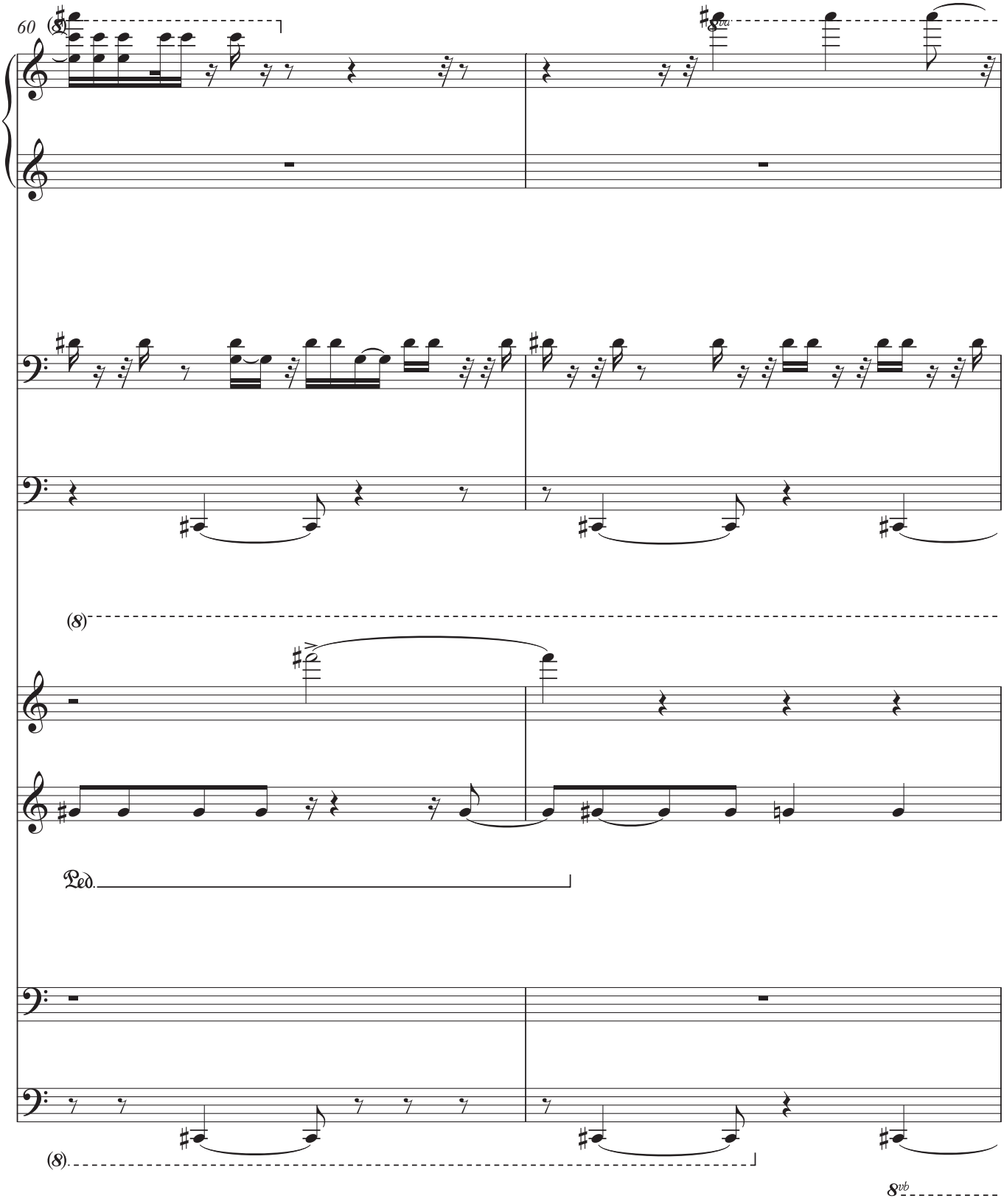

49
8va

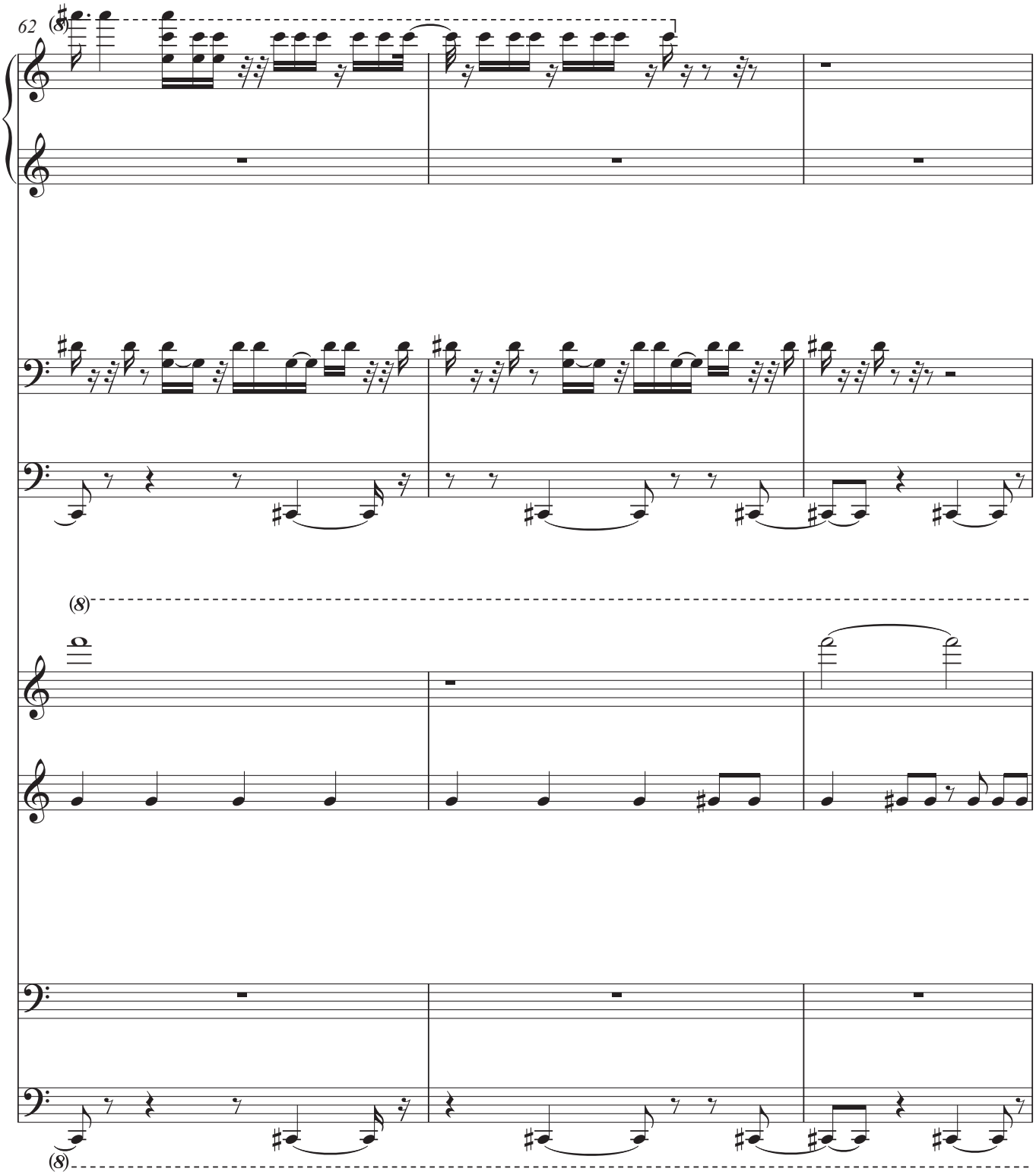

51
(8)
(8)

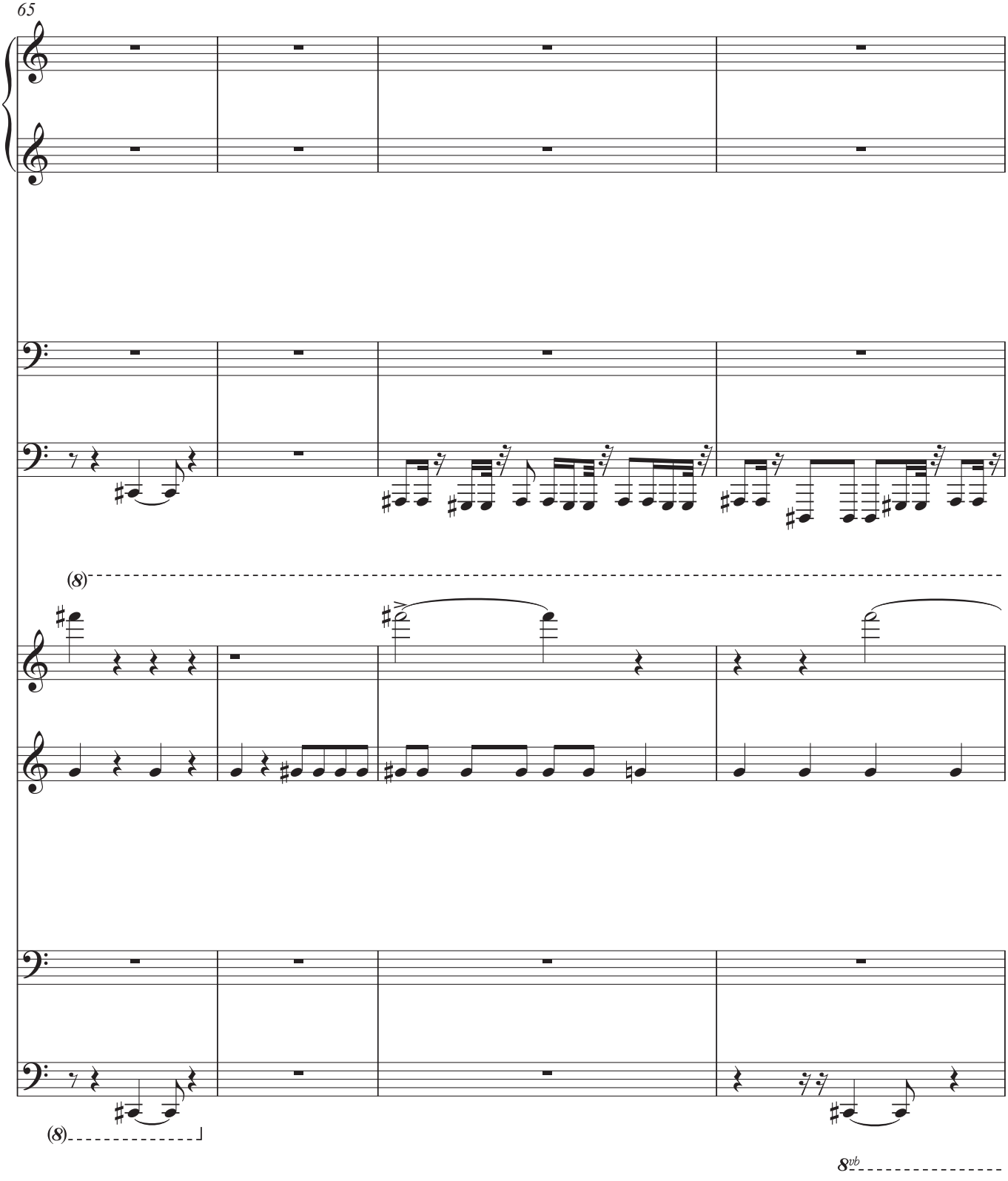

54
Ped.
(8)

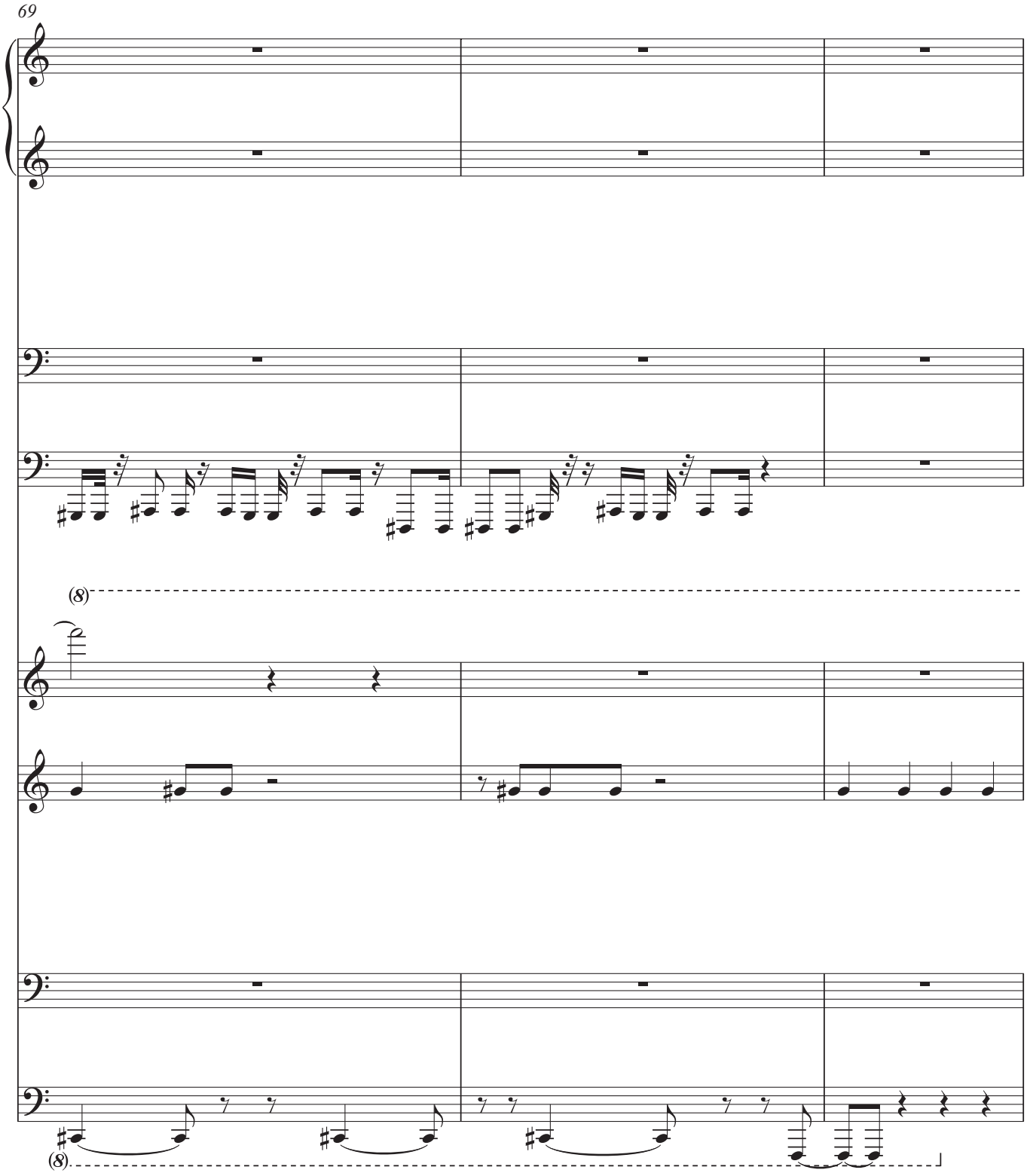

56
8va
(8)

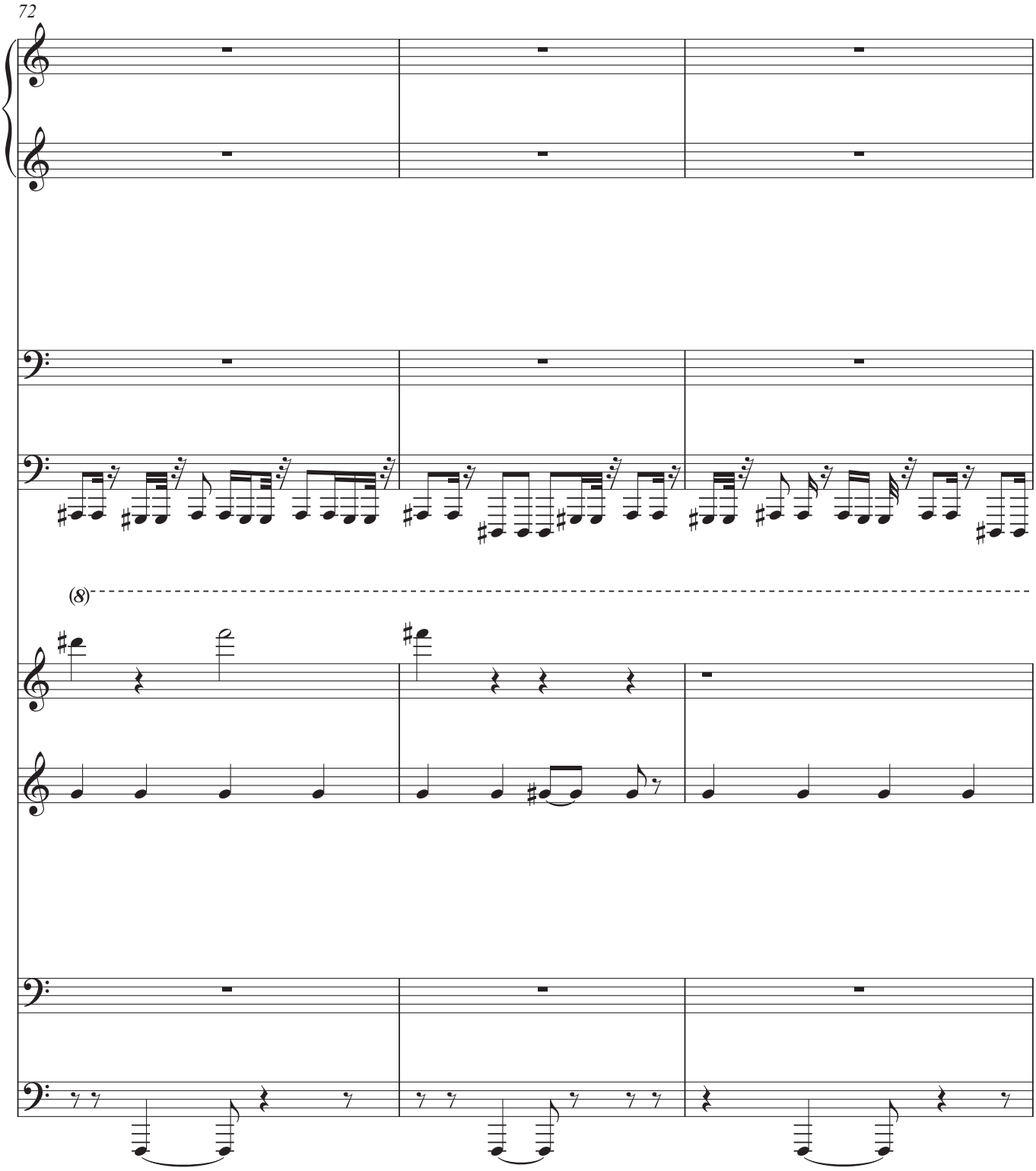

58
8va
(8)
8vb

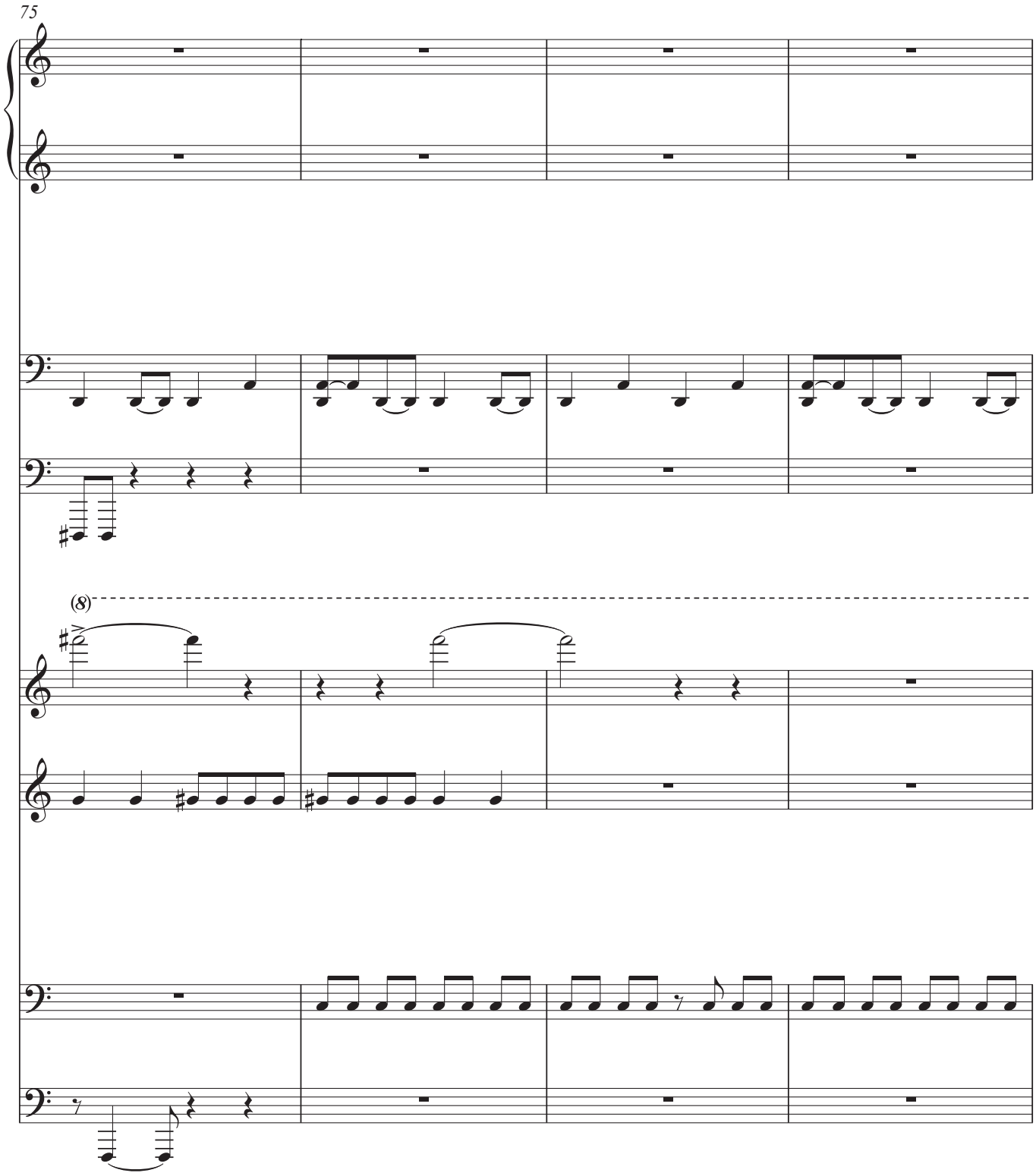

60
(8)
Ped.
(8)
8vb

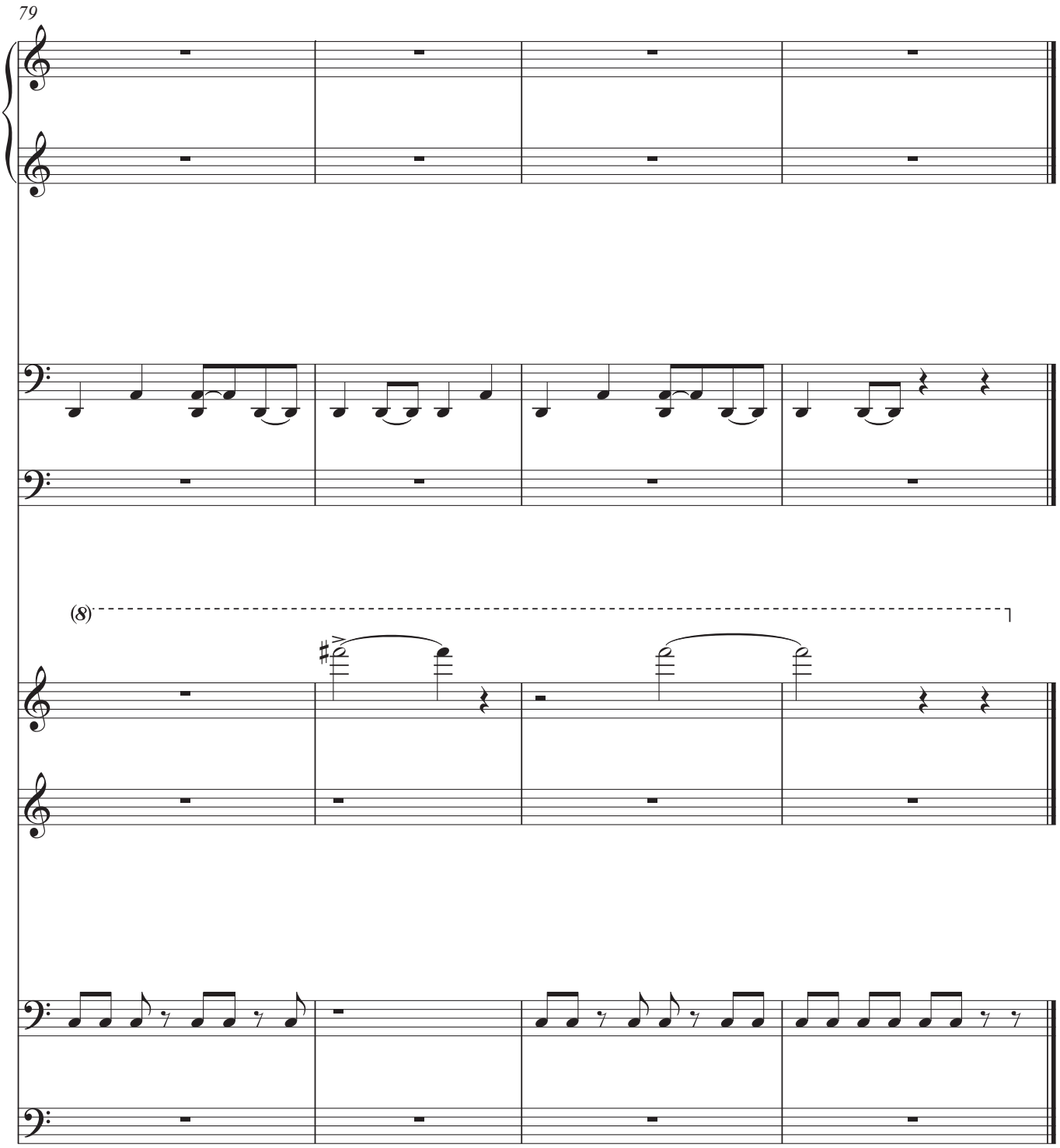

62
(8)
(8)
(8)


65
(8)
(8)
8vb


69
(8)
(8)


72
(8)

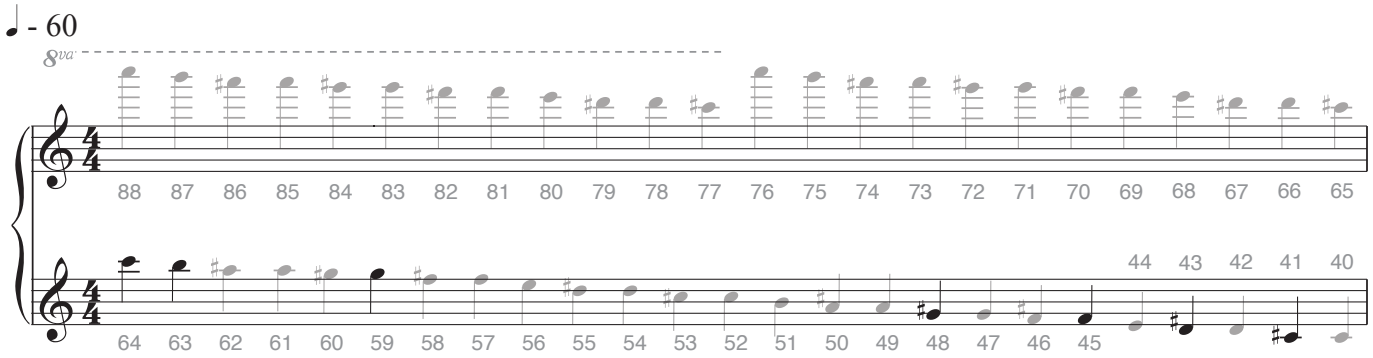

75
(8)


79
(8)

Sincronía

Mapa de datos para movimiento no.2: 'Estado físico activo ó Vivace / Presto'

Estado rítmico cardiaco activo de 22 especies animales (clave de Sol)



88: Siphonaptera [Pulga, do 9] l s/d
87: Cimex lectularius [Chinche, si 8] l s/d
86: Lepidoptera [Mariposa, la#8] l s/d
85: Anisoptera [Libelula, la 8] l s/d
84: Hylotrupes bajulus [Polilla, sol#8] l s/d
83: Caelifera [Saltamontes, sol 8] l s/d
82: Pycnogonida [Araña de mar, fa#8] l s/d
81: Achaearanea tepidariorum [Araña, fa 8] l s/d
80: Helix aspersa [Caracol, mi 8] l s/d
79: Mesodesma mactroides [Almeja, re#8] l s/d
78: Mytilus galloprovincialis [Mejillón, re 8] l s/d
77: Podarcis hispanicus [Lagartija, do#8] l s/d
76: Caridea [Camarón, do 8] l s/d
75: Palinurus elephas [Langosta, si 7] l s/d
74: Carcinus maenas [Cangrejo, la#7] l s/d
73: Salamandra [Salamandra, la 7] l s/d
72: Trochilinae [Colibrí, sol#7] l s/d
71: Rattus norvegicus [Rata, sol 7] l s/d
70: Asteroidea [Estrella de mar, fa#7] l s/d
69: Passer domesticus [Gorrión, fa 7] l s/d
68: Pelophylax perezi [Rana, mi 7] l s/d
67: Bufo bufo [Sapo, re #7] l s/d
66: Serpentes [Serpiente, re 7] l s/d
65: Didelphimorphia [Zarigüeya, do #7] l s/d
64: Suncus murinus [Musaraña, **do 7**] **l CO: c**
63: Corynorhinus townsendii [Murciélago, **si 6**] **l V: c**
62: Columba livia [Paloma, la#6] l s/d
61: Iguanidae [Iguana, la 6] l s/d
60: Mustela putorius furo [Hurón, sol#6] l s/d
59: Erinaceinae [Erizo, **sol 6**] **l CA: 1/16 1/32**
58: Thunnus [Atún, fa#6] l s/d
57: Oryctolagus cuniculus [Conejo, fa 6] l s/d
56: Nothura maculosa [Perdice, mi 6] l s/d
55: Melopsittacus undulatus [Perico, re#6] l s/d
54: Gallus gallus domesticus [Gallina, re 6] l s/d
53: Anas platyrhynchos domesticus [Pato, do#6] l s/d
52: Anser anser [Ganso, do 6] l s/d
51: Falco peregrinus [Halcón, si 5] l s/d
50: Accipitridae [Águila, la#5] l s/d
49: Grus grus [Cisne, la 5] l s/d
48: Felis silvestris catus [Gato, **sol#5**] **l CO: 1/16 1/32**
47: Erethizon dorsatum [Puercoespín, sol 5] l s/d
46: Dasypodidae [Armadillo, fa#5] l s/d
45: Talpa europaea [Topo, **fa 5**] **l CA: 1/16 1/32**
44: Marmota marmota [Marmota, mi 5] l s/d
43: Strigidae [Buho, re #5] l s/d
42: Ornithorhynchus anatinus [Ornitorrinco, **re 5**] **l N: 2/4**
41: Pelecanus onocrotalus [Pelicano, do #5] l s/d
40: Testudines [Tortuga, **do 5**] **l N: 60/4**

CA: Caminata
CO: Corre
V: Vuelo
N: Nado

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

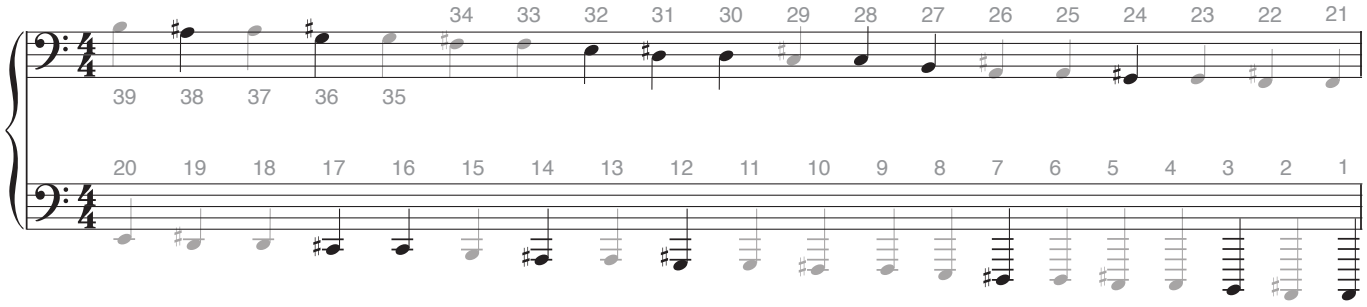
Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

Sincronía

Mapa de datos para movimiento no.2: 'Estado físico activo ó Vivace / Presto'

Estado rítmico cardiaco activo de 22 especies animales (clave de Fa)

♩ - 60



39: Apteryx australis [Kiwi, si 4] l s/d
38: Phascolarctos cinereus [Koala, **la#4**] **l CA: 1/16 1/32**
37: Octopus vulgaris [Pulpo, la 4] l s/d
36: Vulpini [Zorro, **sol#4**] **l CA: 1/64**
35: Pan troglodytes [Chimpance, sol 4] l s/d
34: Canis latrans [Coyote, fa#4] l s/d
33: Canis lupus familiaris [Perro, fa 4] l s/d
32: Canis lupus [Lobo, **mi 4**] **l CO: 1/8**
31: Ovis orientalis aries [Oveja, **re#4**] **l CA: 1/8 1/16**
30: Capra aegagrus hircus [Cabra, **re 4**] **l CA: 1/8 1/32**
29: Spheniscidae [Pingüino, do#4] l s/d
28: Homo sapiens [Humano, **do 4**] **l CO: 1/16 1/32**
27: Sus scrofa domestica [Cerdo, **si 3**] **l CO: 1/16 1/32**
26: Equus africanus-ferus [Mula, la#3] l s/d
25: Lacertilia [Lagarto, la 3] l s/d
24: Cervus elaphus [Venado, **sol#3**] **l CO: 1/16 1/32**
23: Antilope cervicapra [Antílope, sol 3] l s/d
22: Macropus giganteus [Cangüro, fa#3] l s/d
21: Panthera leo [León, fa 3] l s/d
20: Panthera tigris [Tigre, mi 3] l s/d
19: Rhea americana [Avestruz, re#3] l s/d
18: Lama glama [Llama, re 3] l s/d
17: Phoca vitulina [Foca, **do#3**] **l CO: 1/16 1/32**
16: Equus ferus caballus [Caballo, **do 3**]
l CO: 1/8 1/16 1/32

15: Camelus bactrianus [Camello, si 2] l s/d
14: Odobenus rosmarus [Morsa, **la#2**] **l CO: 1/16 1/32**
13: Gorilla [Gorila, la 2] l s/d
12: Tursiops truncatus [Delfín, **sol#2**] **l N: 1/8**
11: Bos primigenius taurus [Vaca, sol 2] l s/d
10: Bos primigenius taurus [Toro, fa#2] l s/d
9: Bos primigenius taurus [Buey, fa 2] l s/d
8: Ursus arctos arctos [Oso, mi 2] l s/d
7: Otaria flavescens [Lobo Marino, **re#2**] **l N: 3/4**
6: Bos primigenius indicus [Cebuino, re 2] l s/d
5: Bison bison [Búfalo, do#2] l s/d
4: Selachimorph [Tiburón, do 2] l s/d
3: Giraffa camelopardalis [Girafa, **si 1**] **l CO: 1/16 1/32**
2: Loxodonta africana [Elefante, la#1] l s/d
1: Balaena mysticetus [Ballena, **la 1**] **l N: 6/4**

CA: Caminata
CO: Corre
V: Vuelo
N: Nado

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

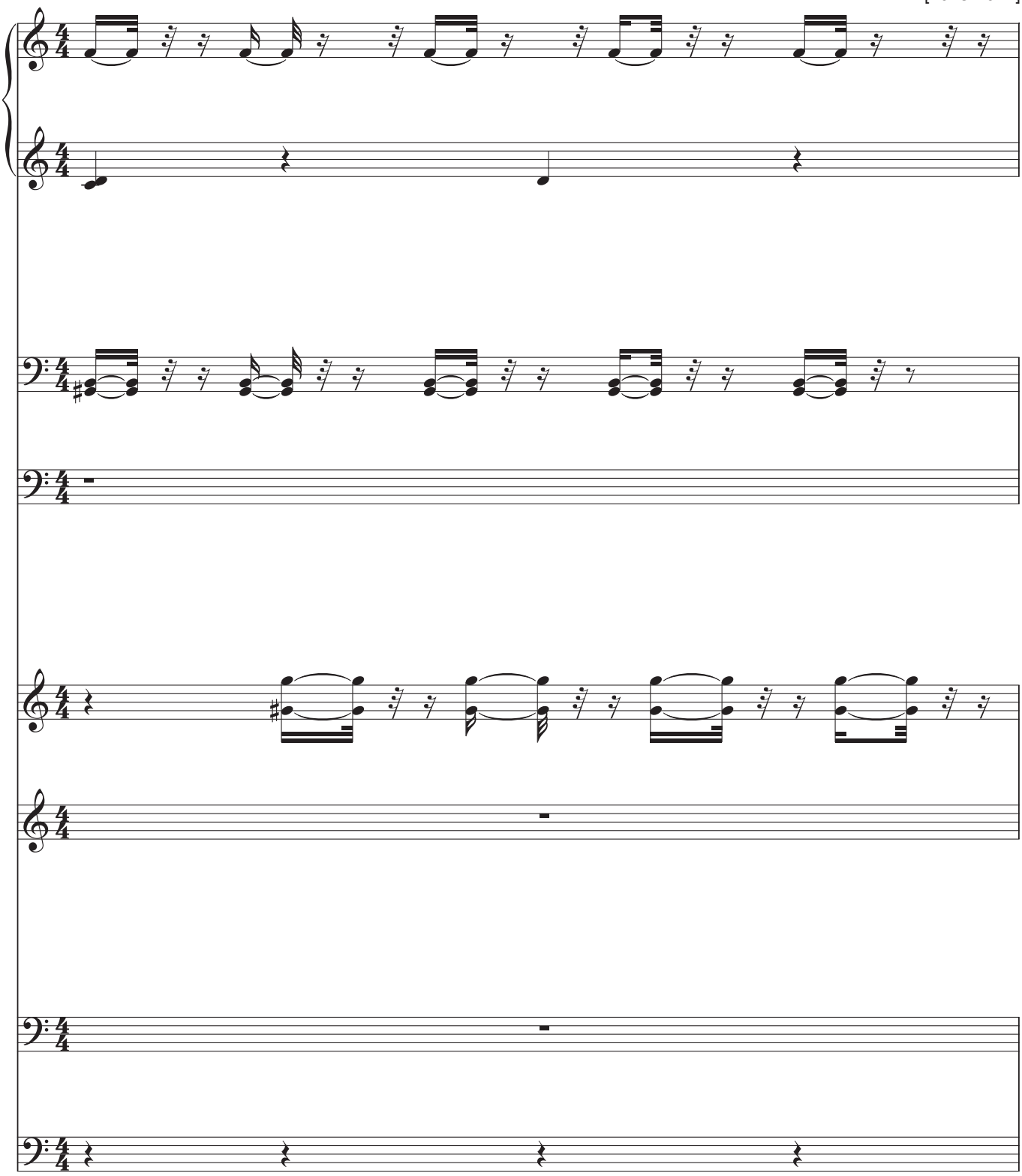
Sincronía

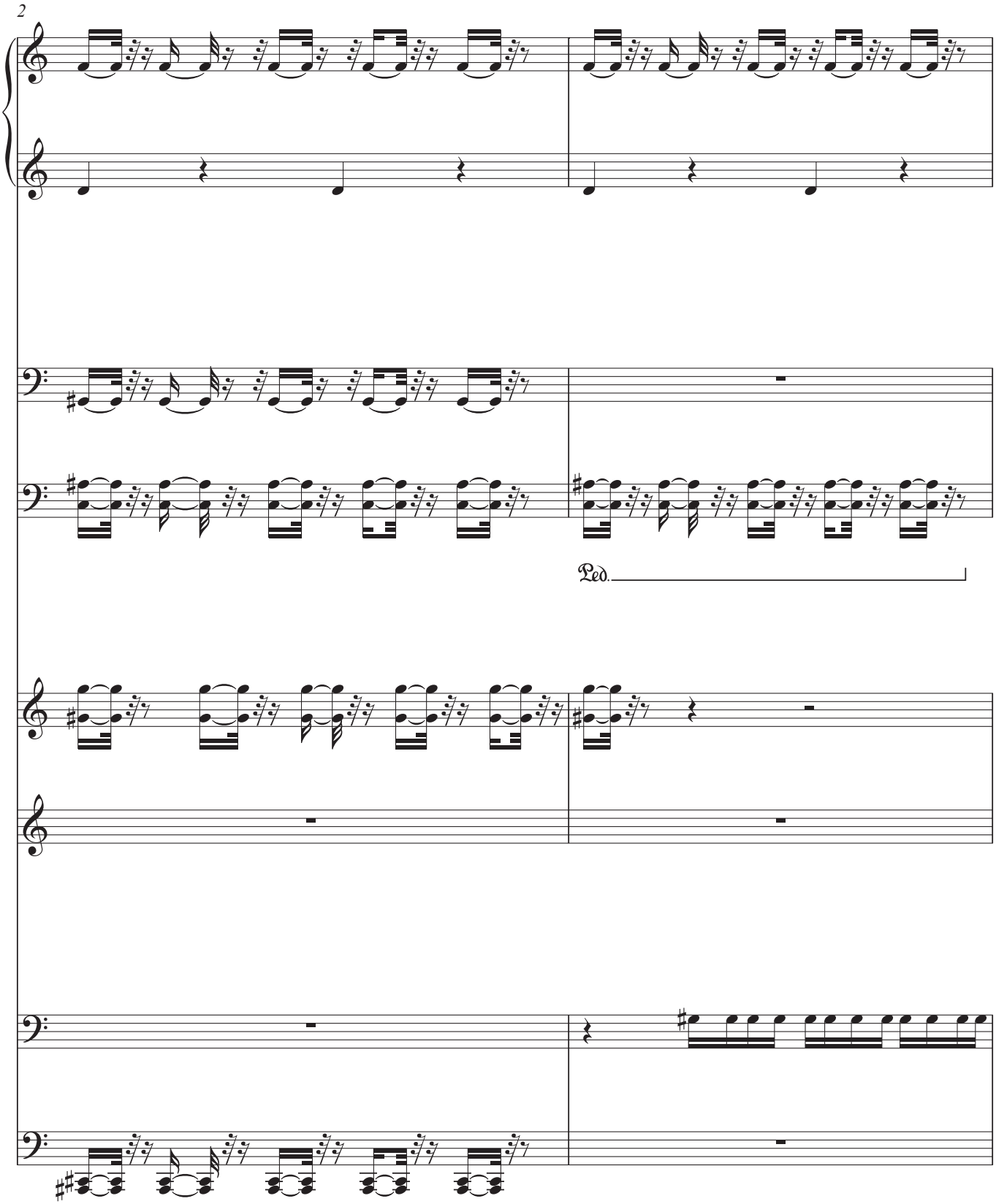
Movimiento no.2: 'Estado físico activo ó Vivace / Presto'

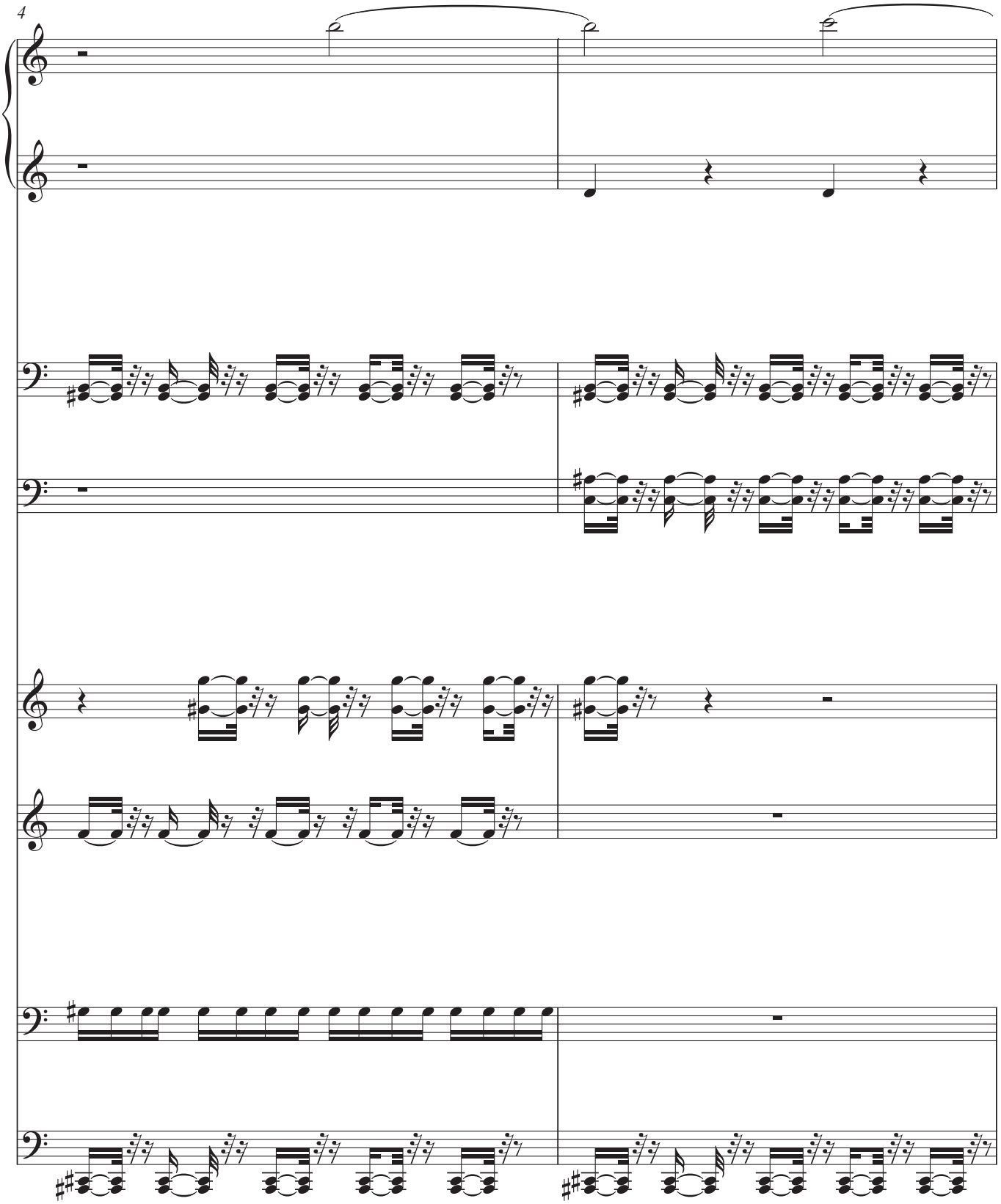
Estado rítmico cardiaco activo de 22 especies animales

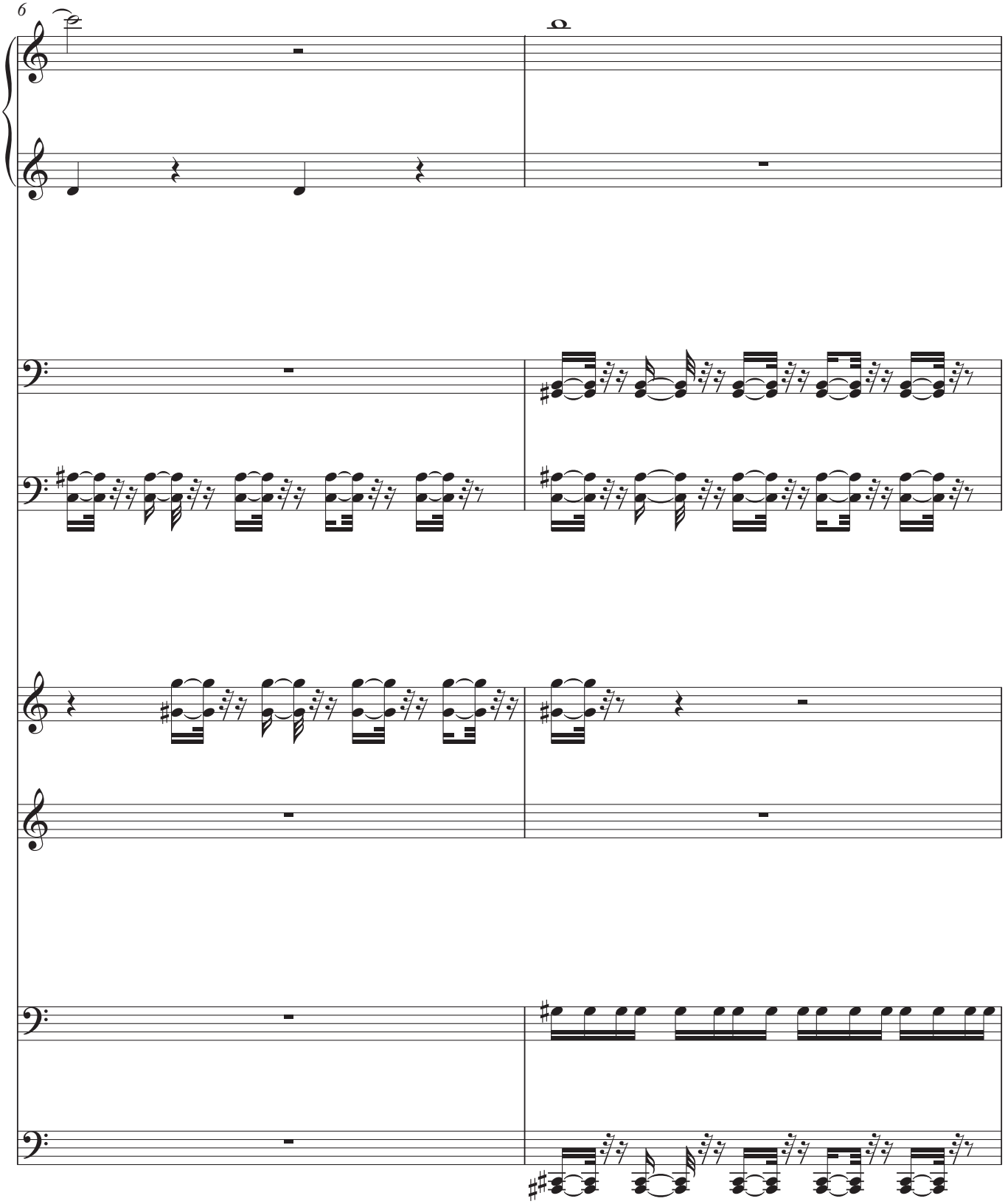
Lorena Mal
Emilio Hinojosa Carrión

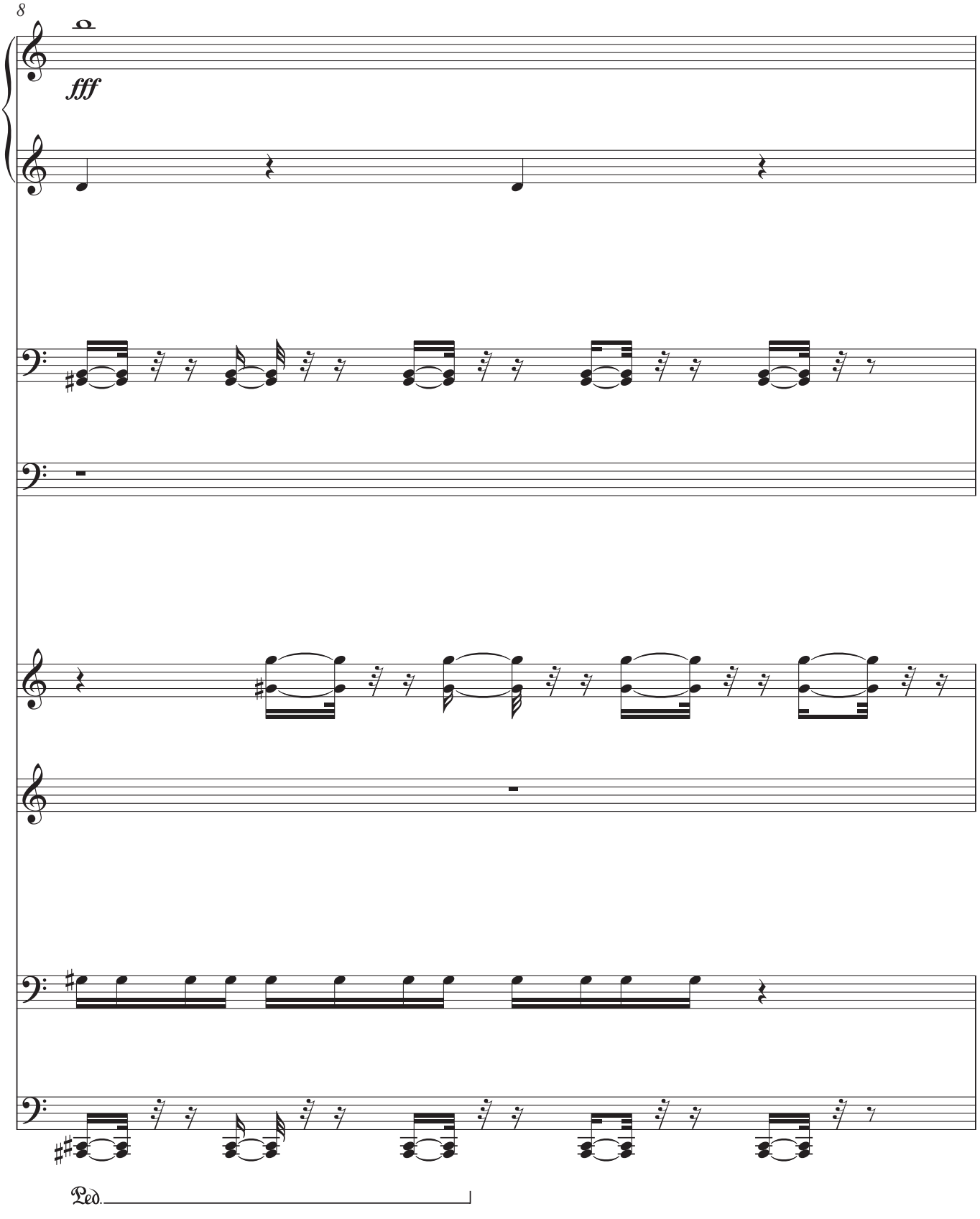
[2013-2014]

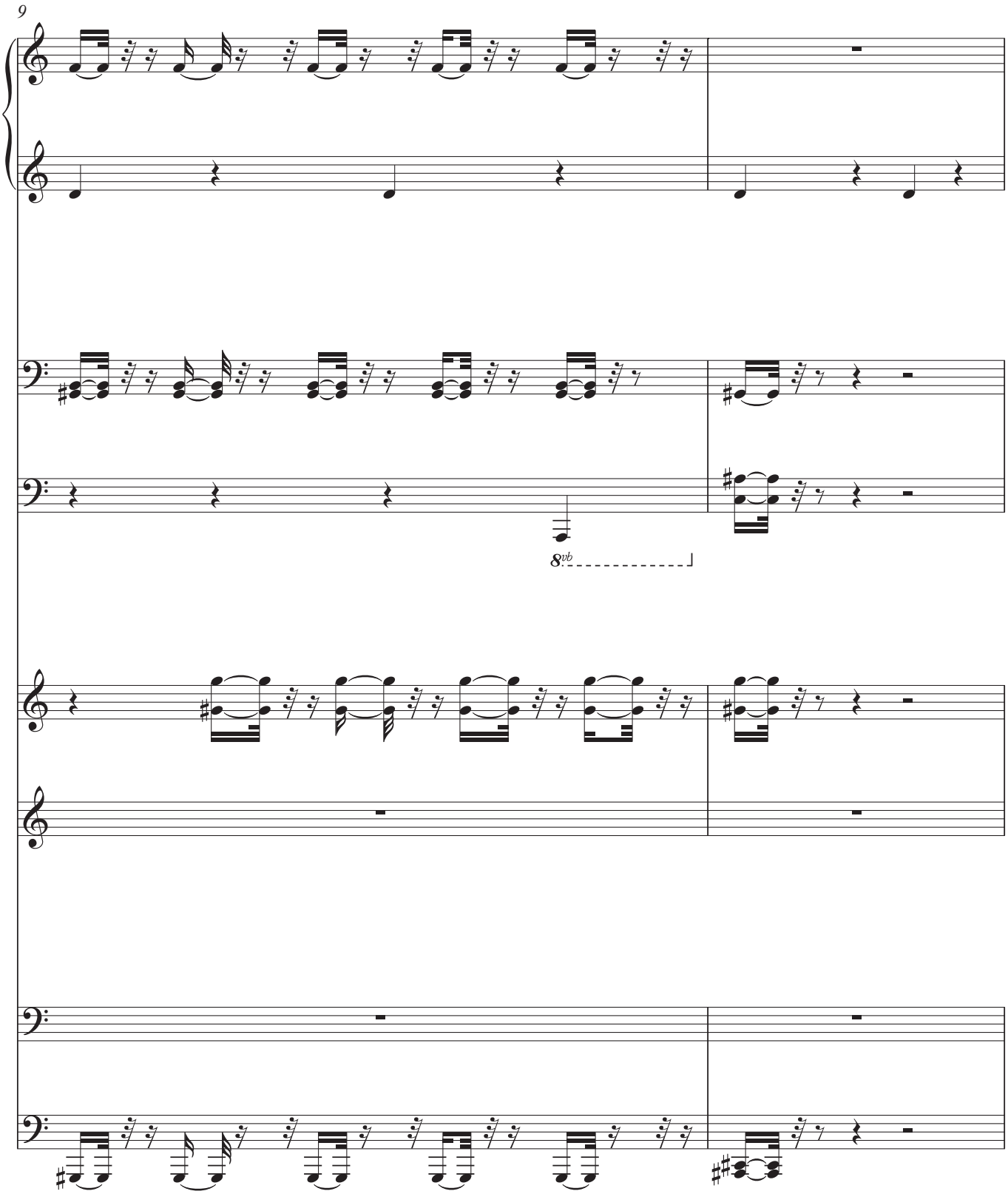


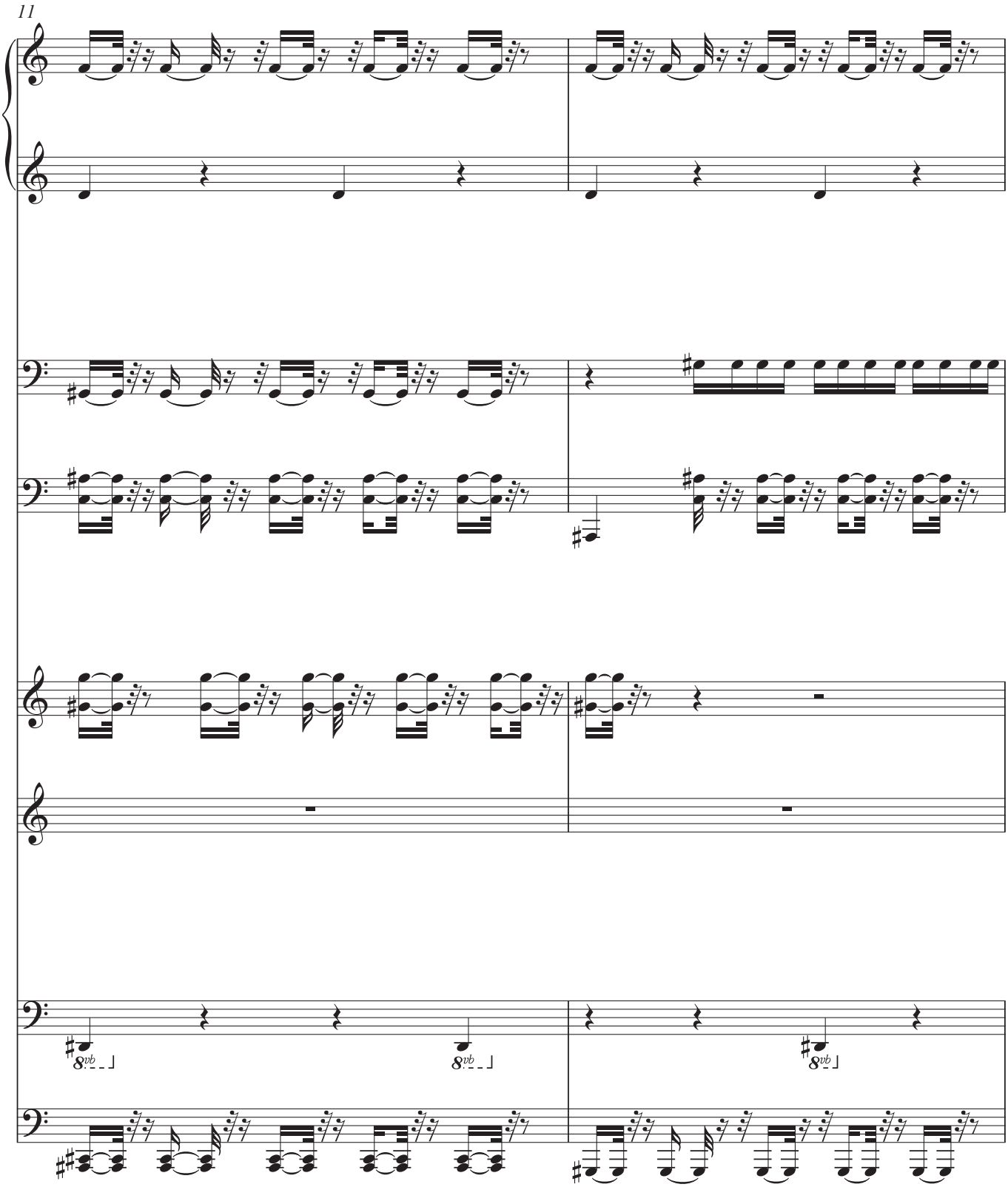

2
Ped.

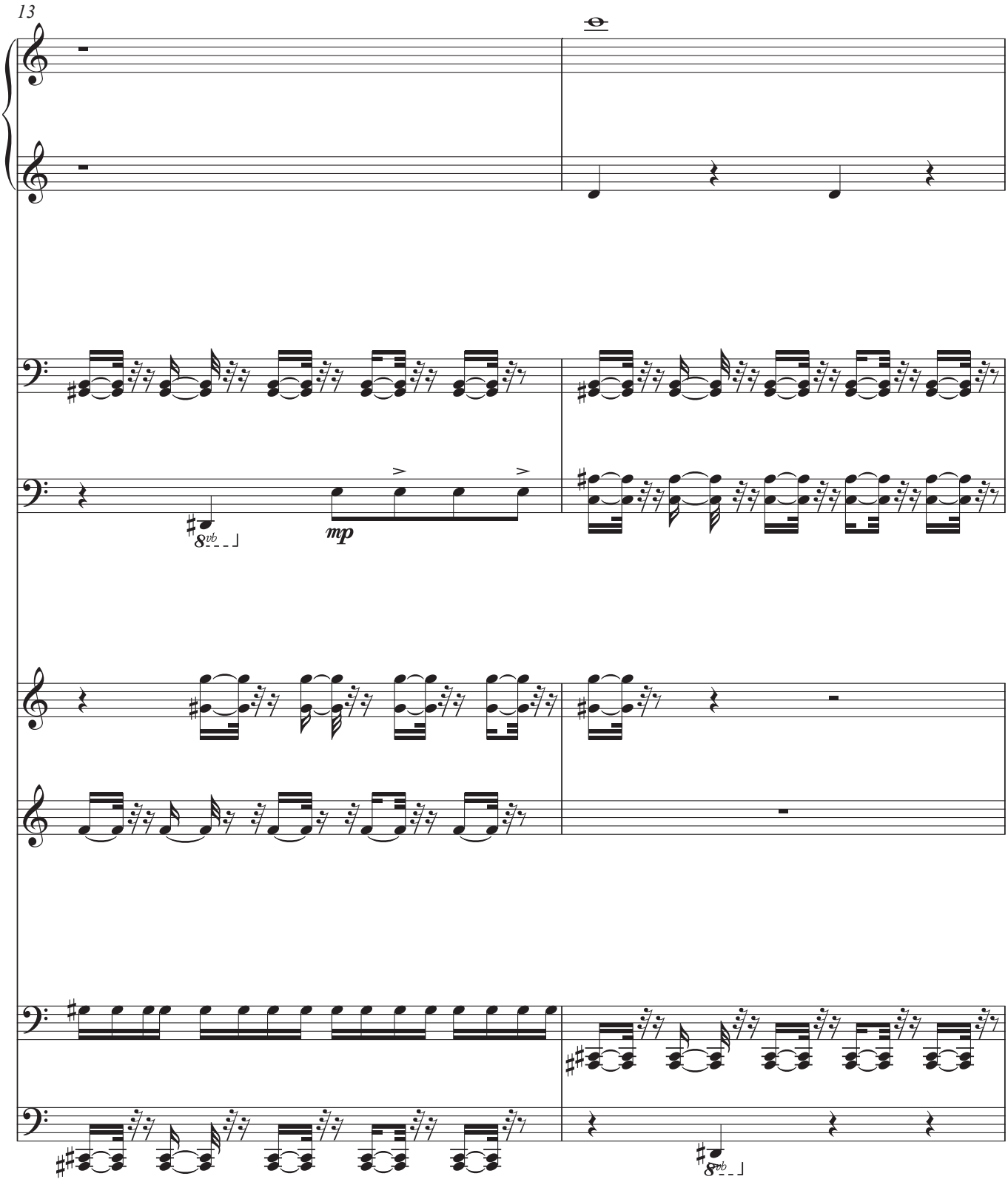

4

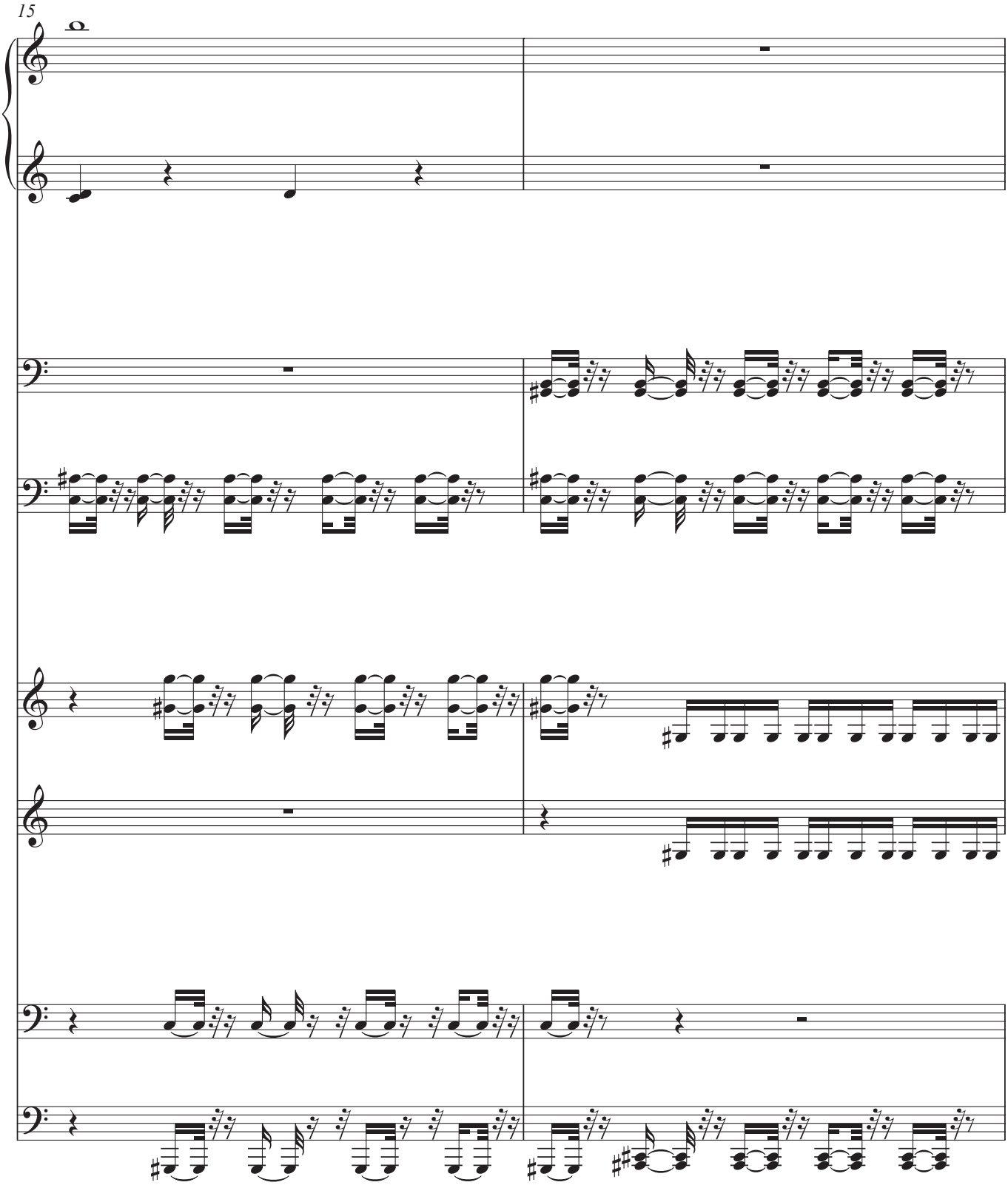

6

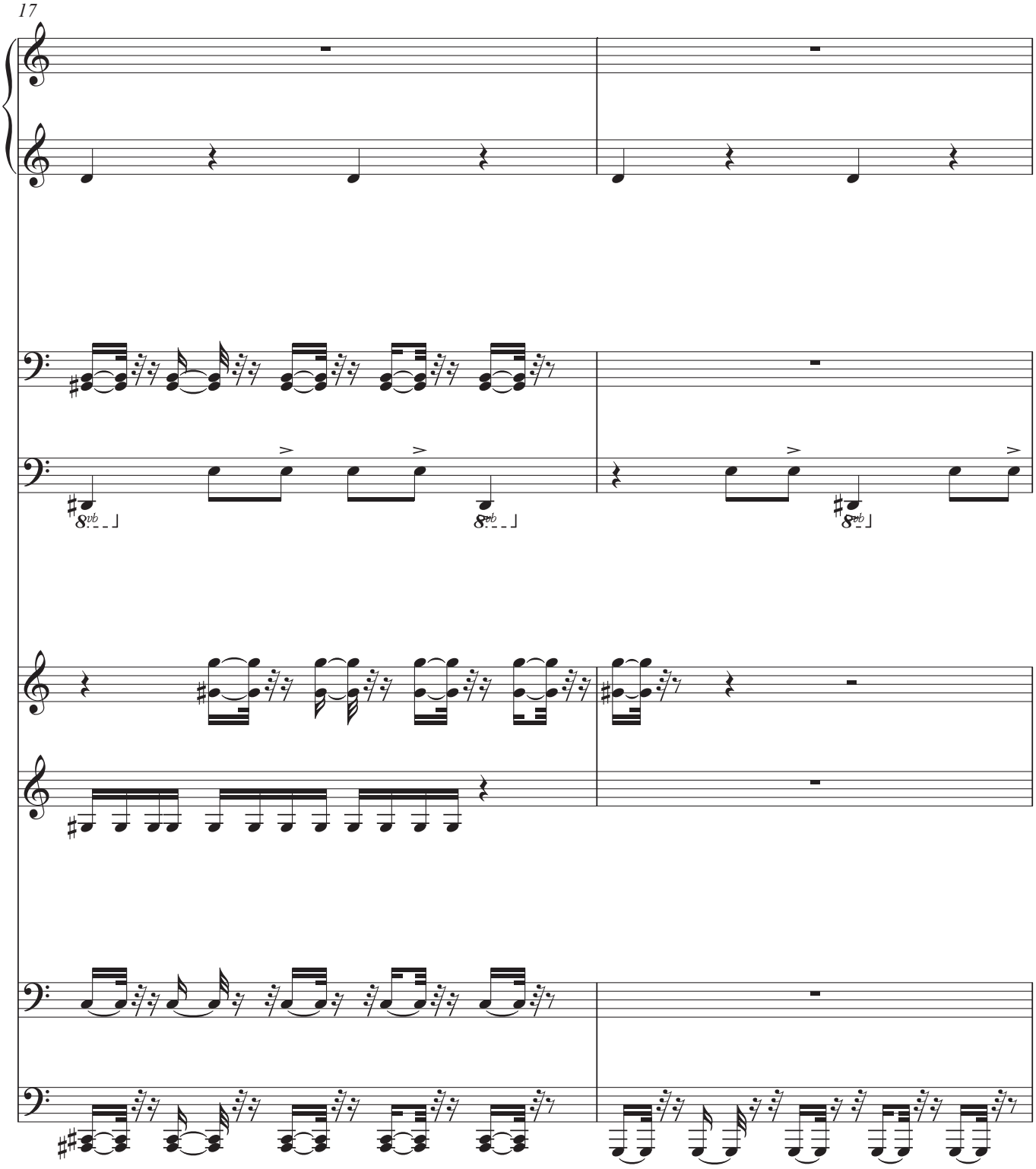

8
fff
Ped.

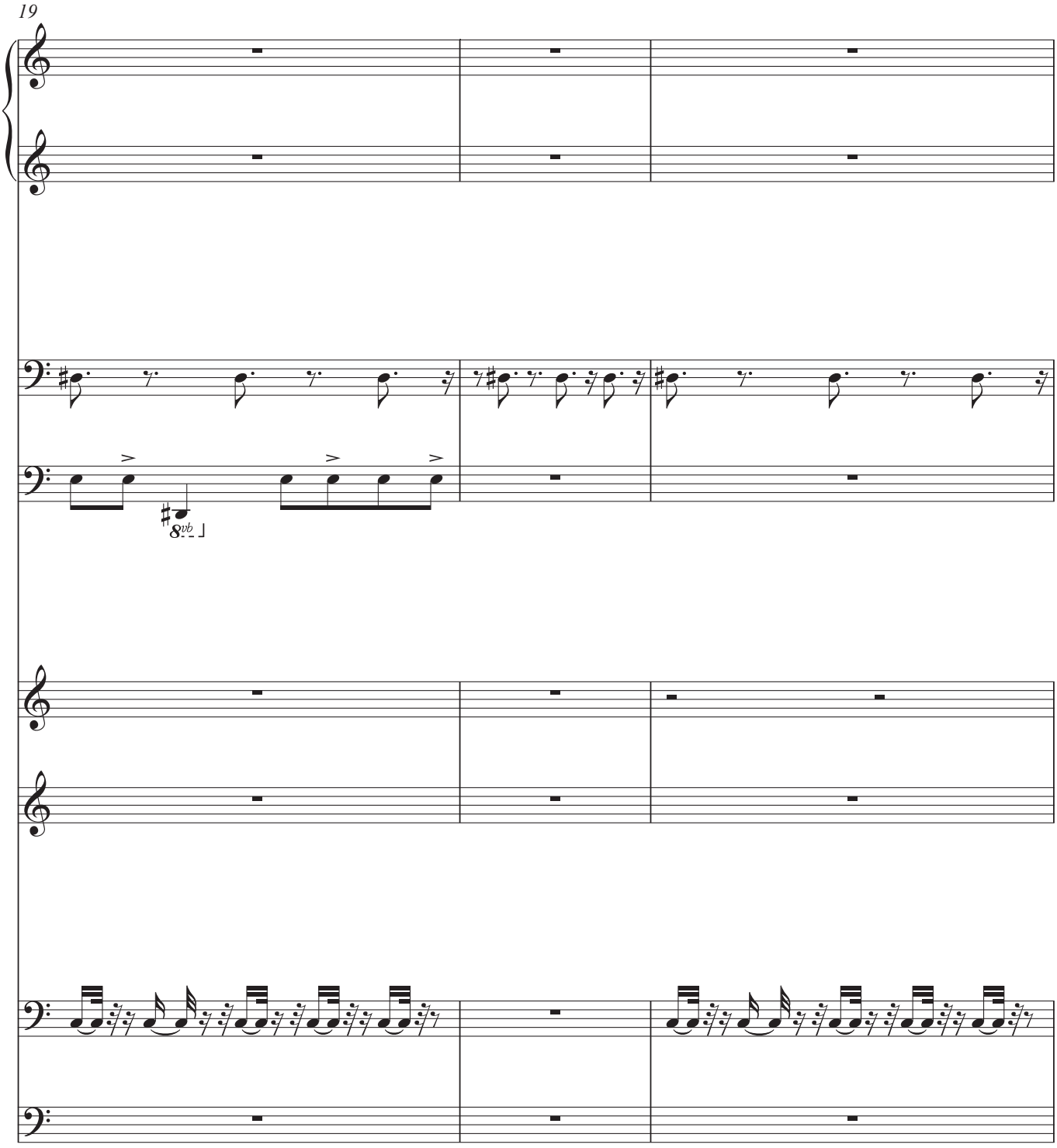

9
8vb

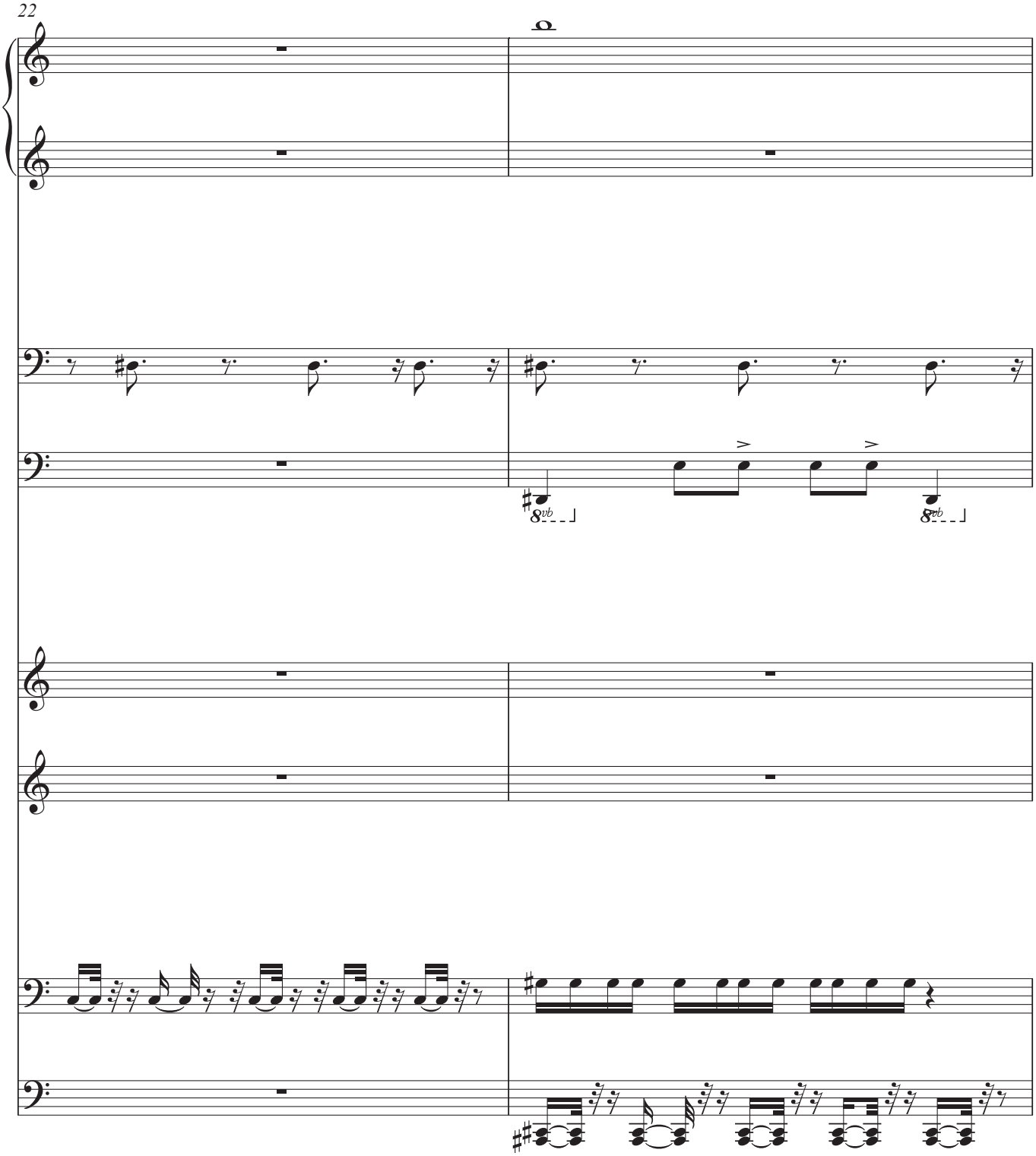

11
8vb
8vb
8vb

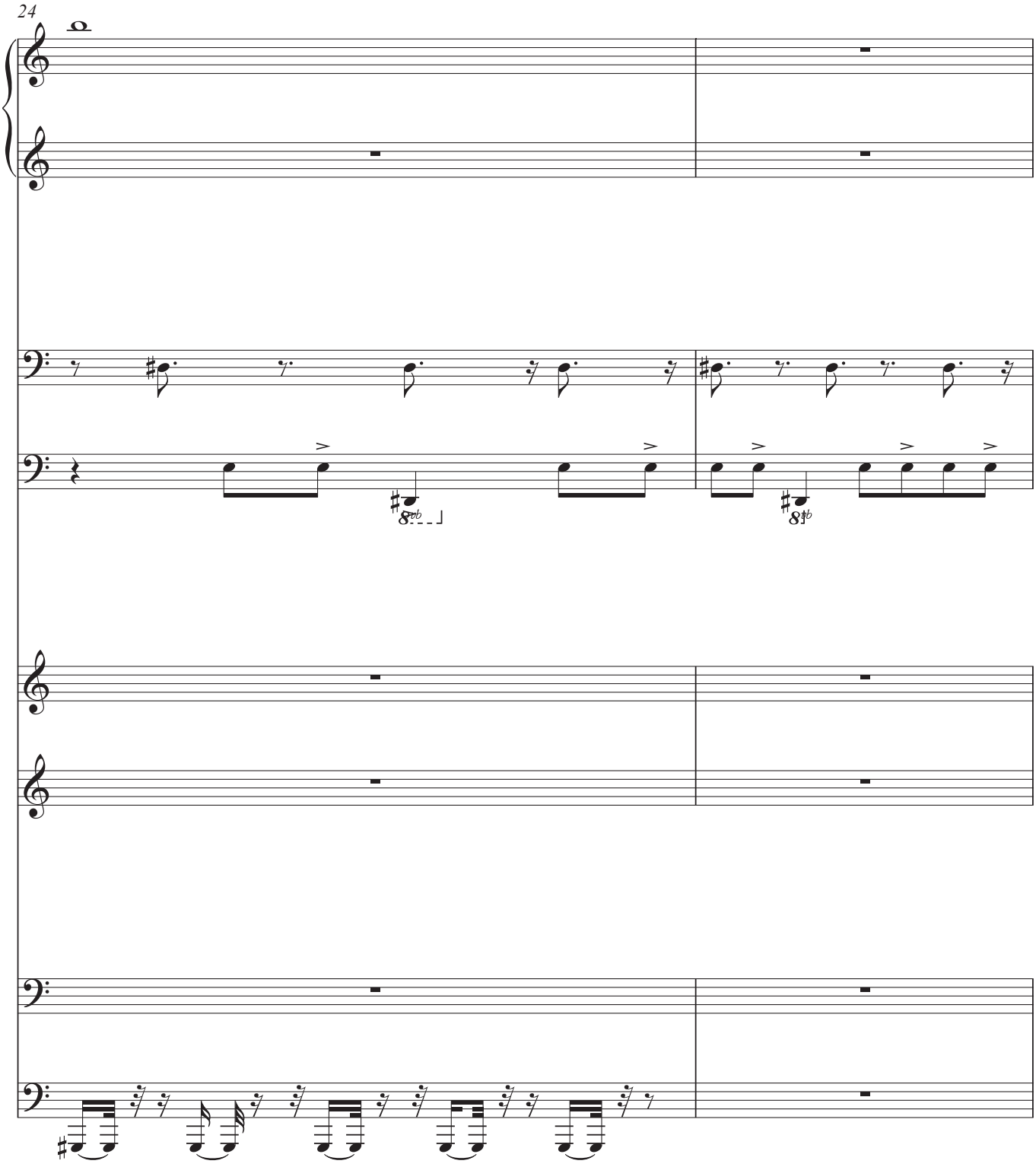

13
8vb
mp
8vb

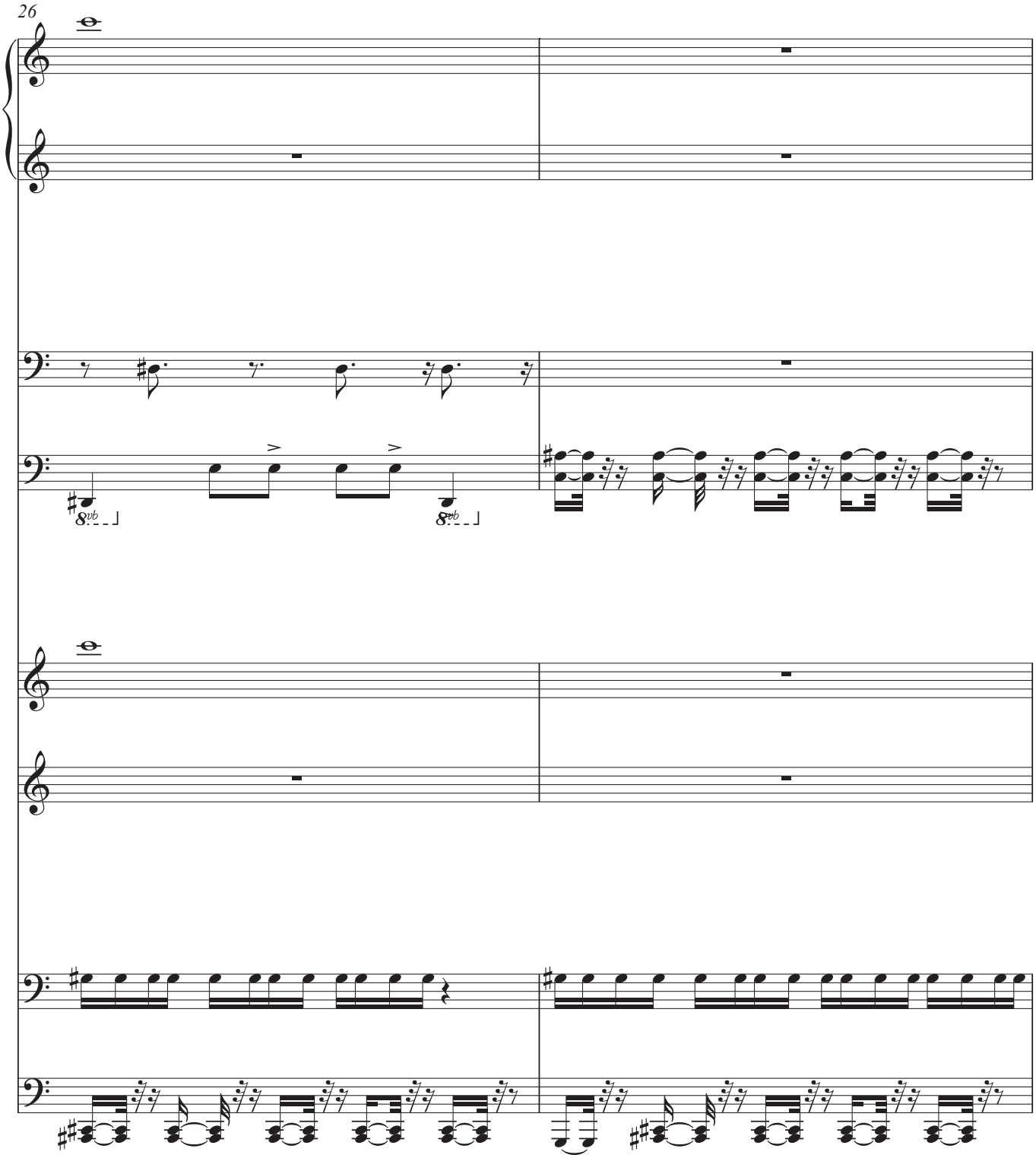

15

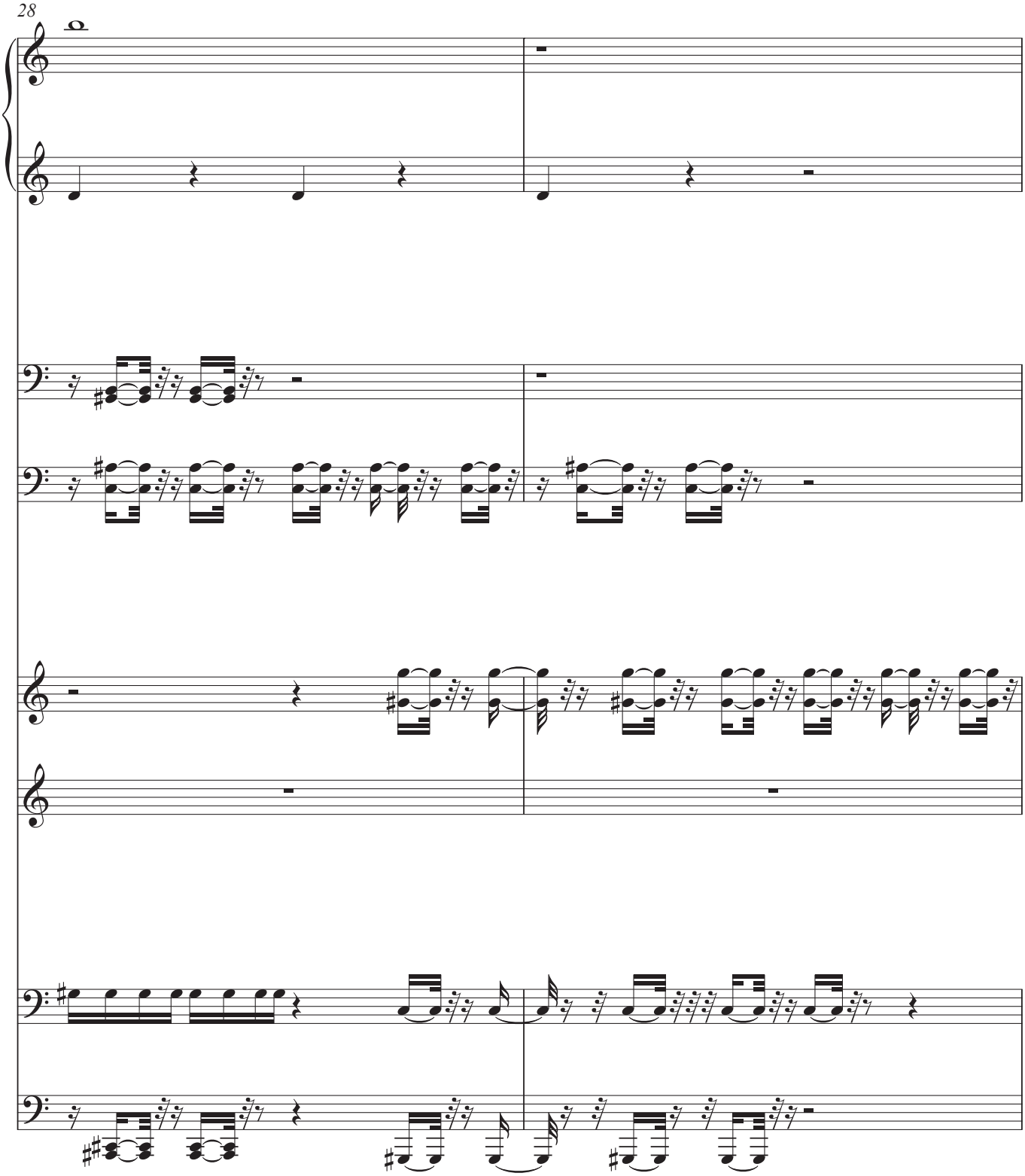

17
8vb
8vb
8vb

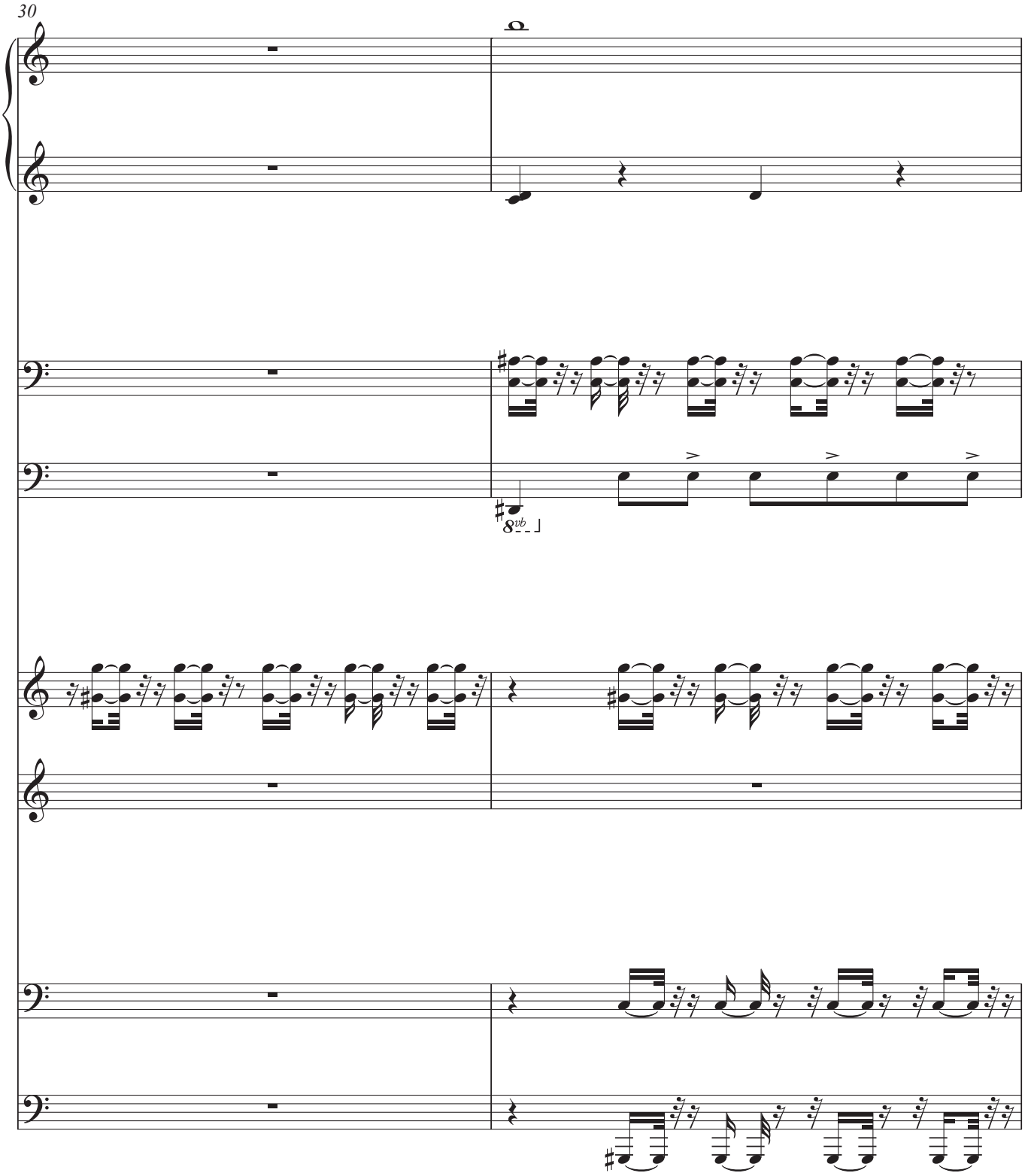

19
8vb

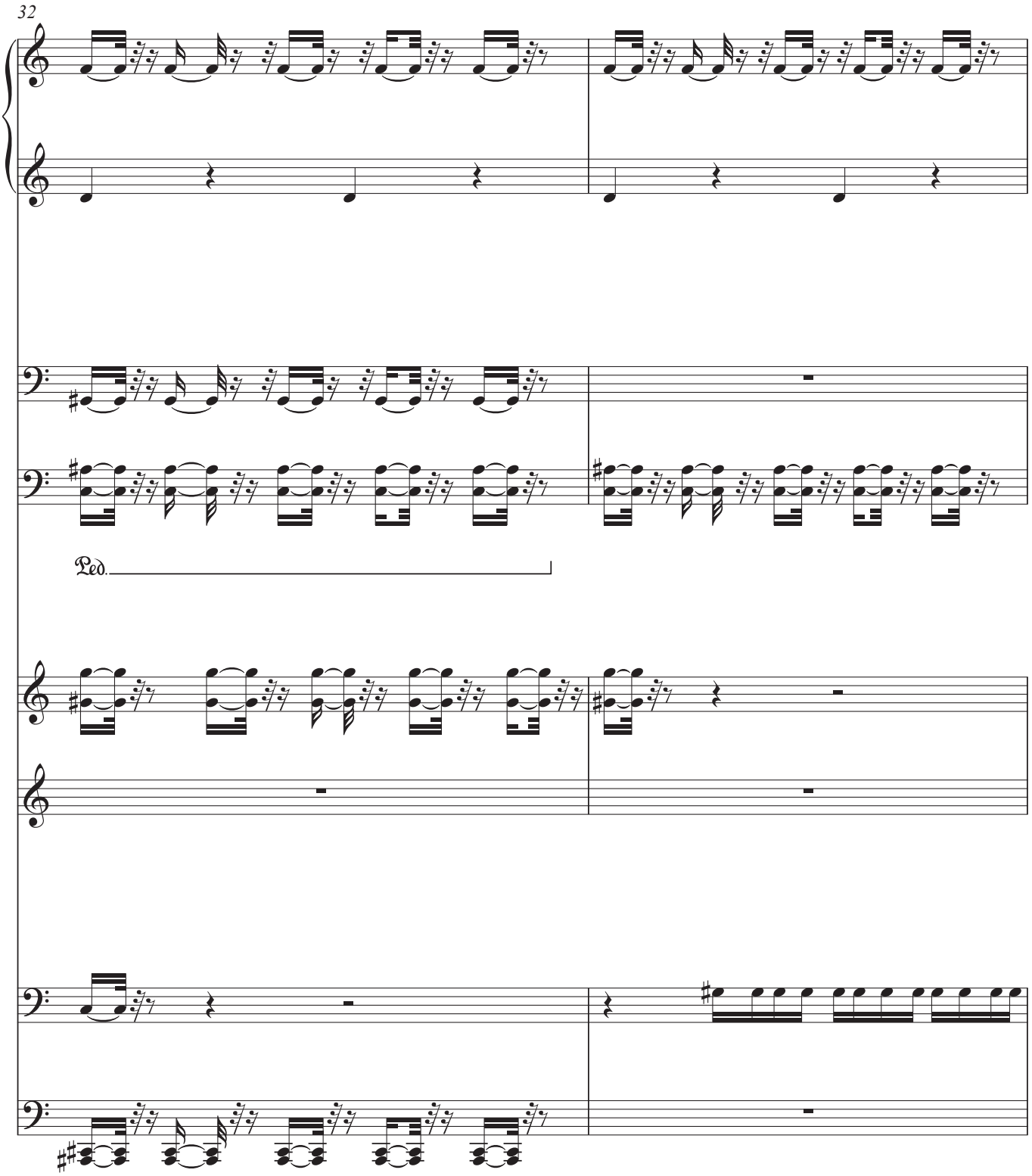

22
8vb
8vb

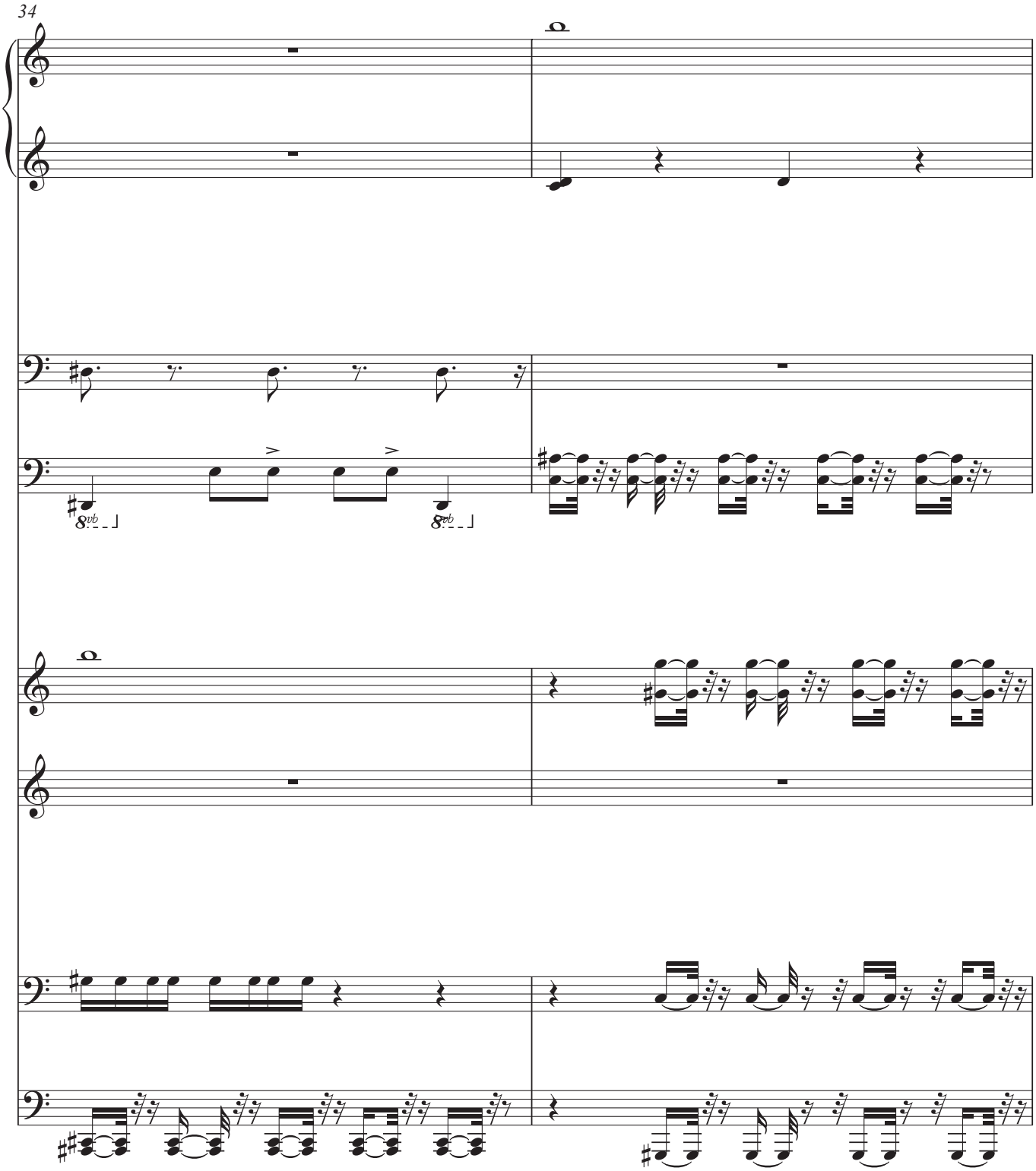

24

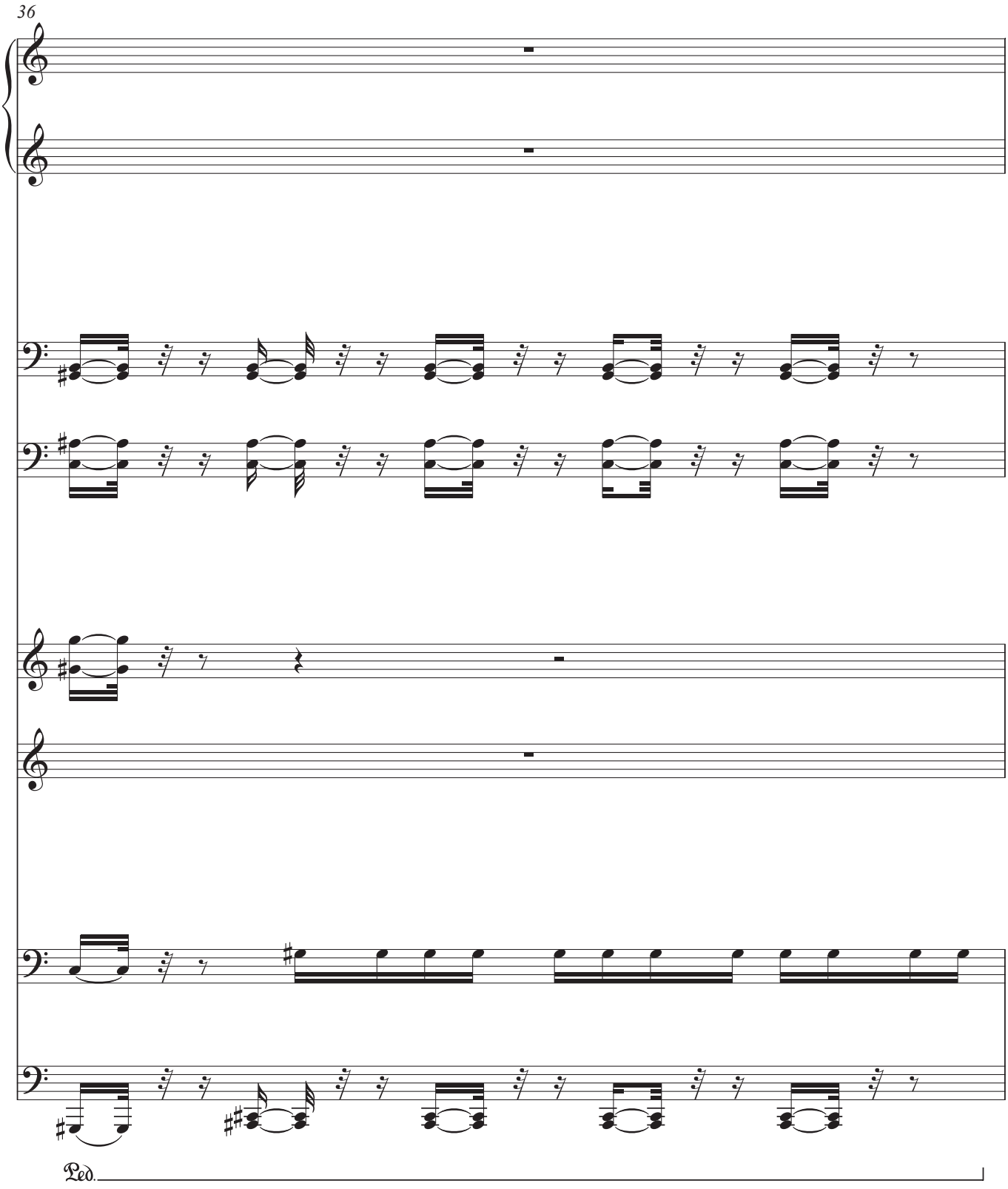

26
8vb
8vb

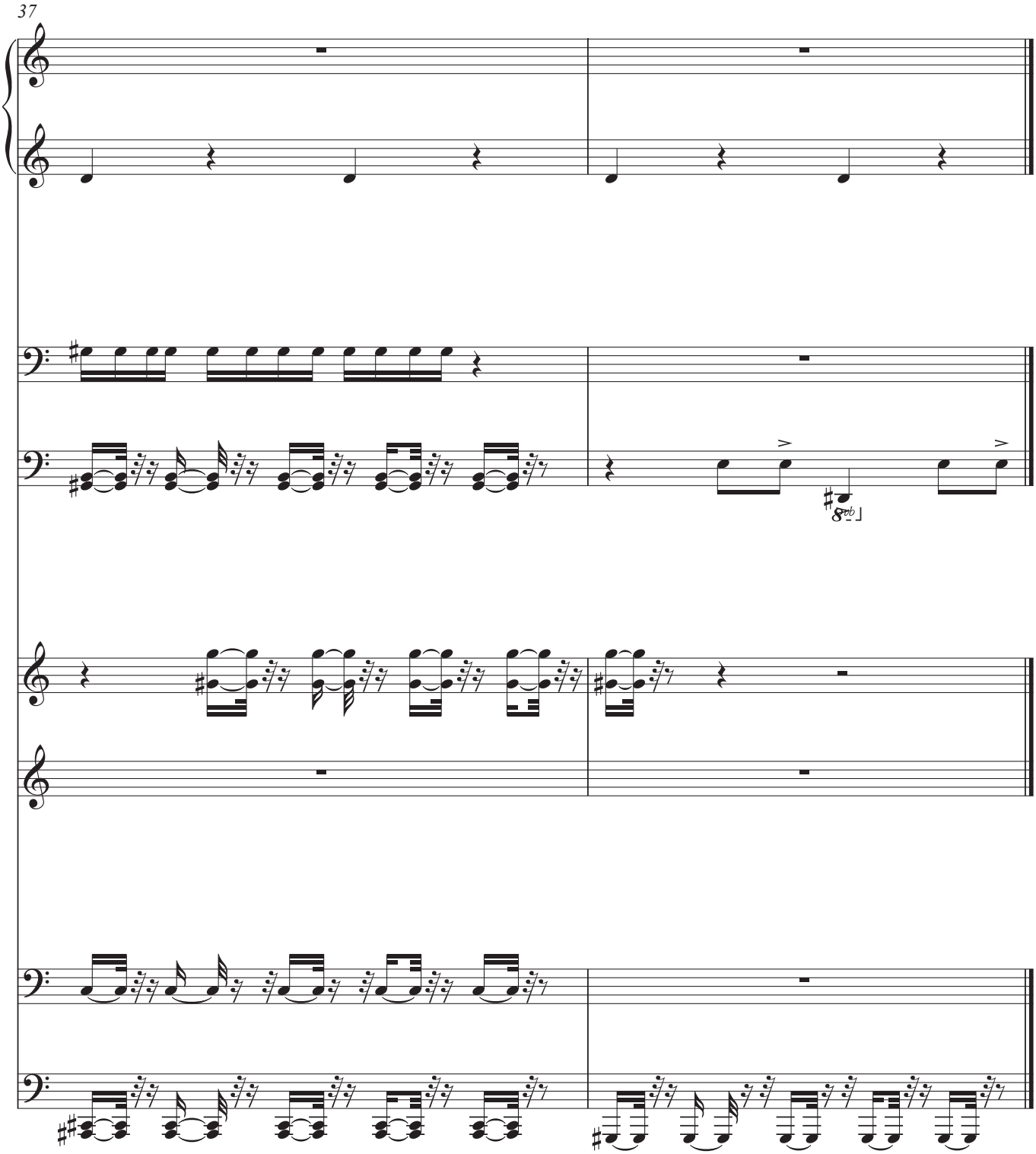

28


30
8vb


32
Ped.


34
8vb
8vb


36
Ped.


37

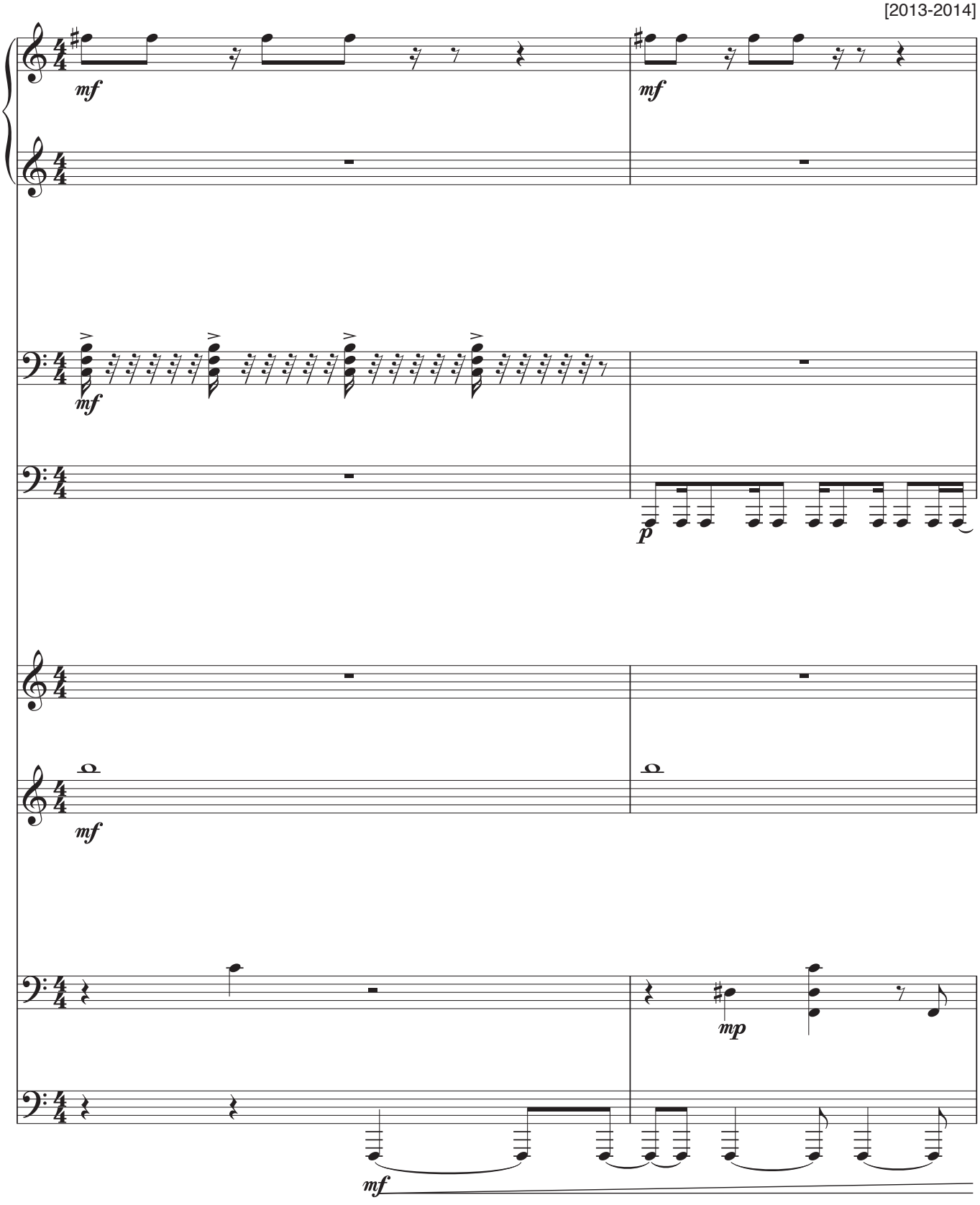
Sincronía

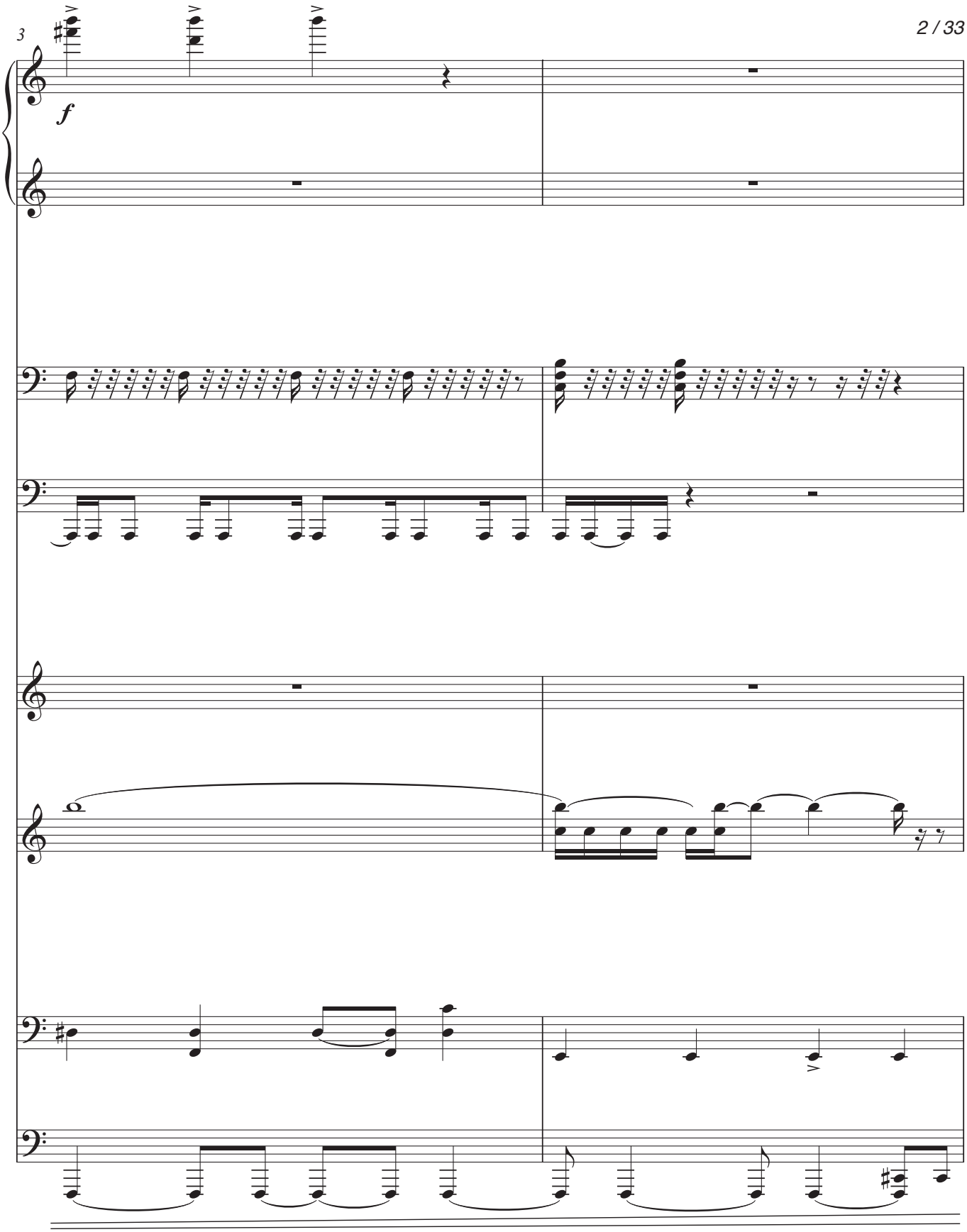
Movimiento no.1-B: 'Estado físico en calma ó Andante'

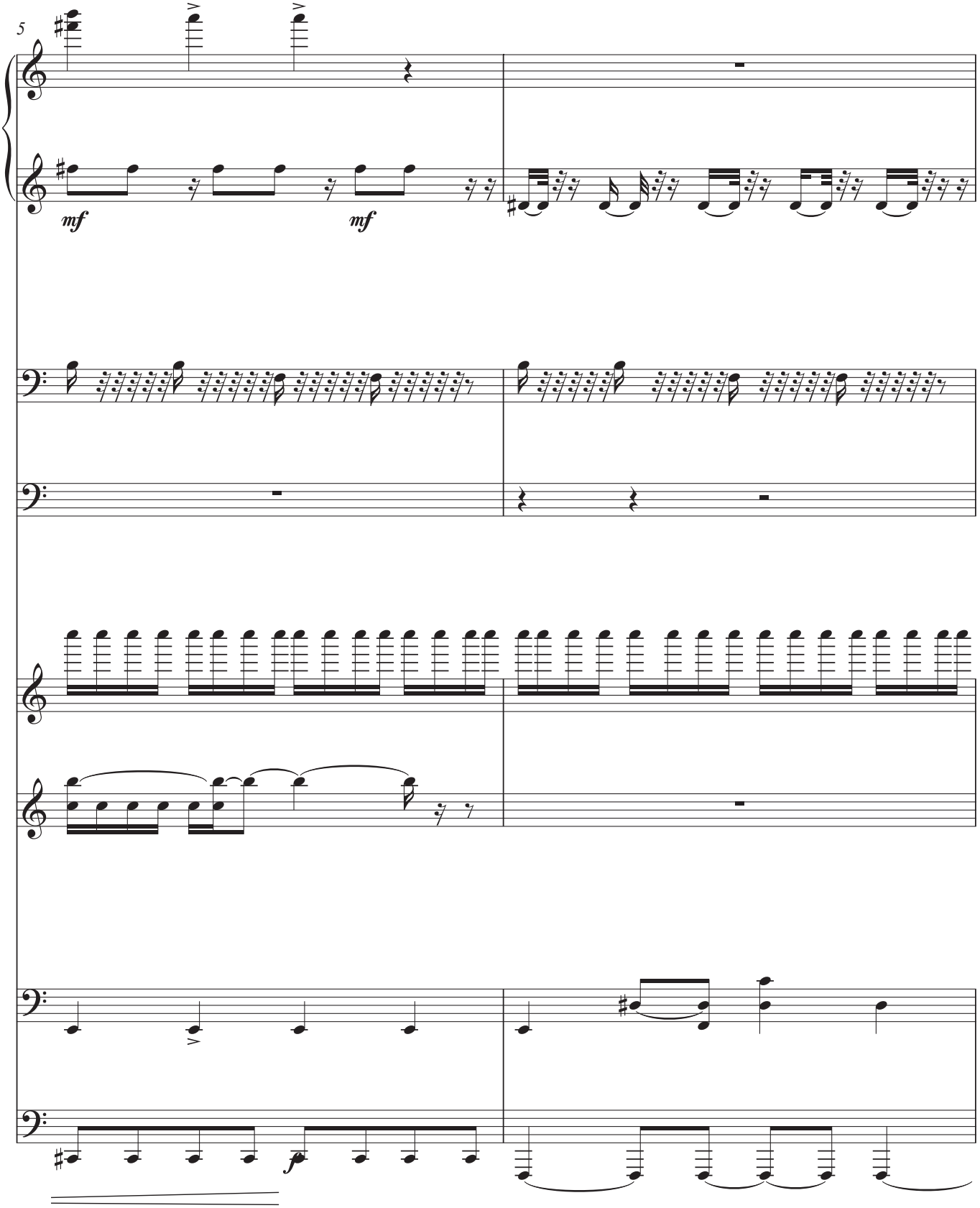
Estado rítmico cardiaco en calma de 88 especies animales

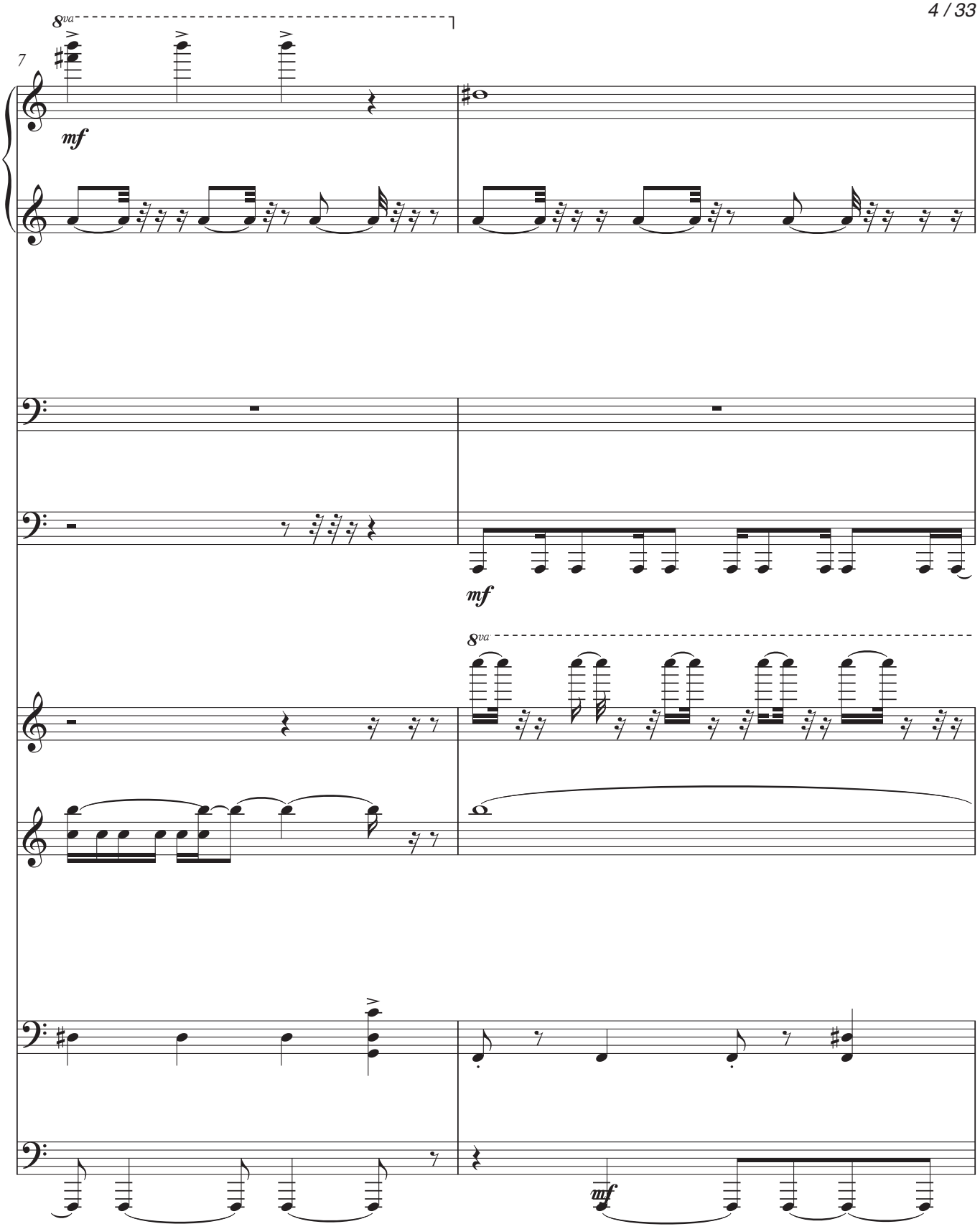
♩ - 60

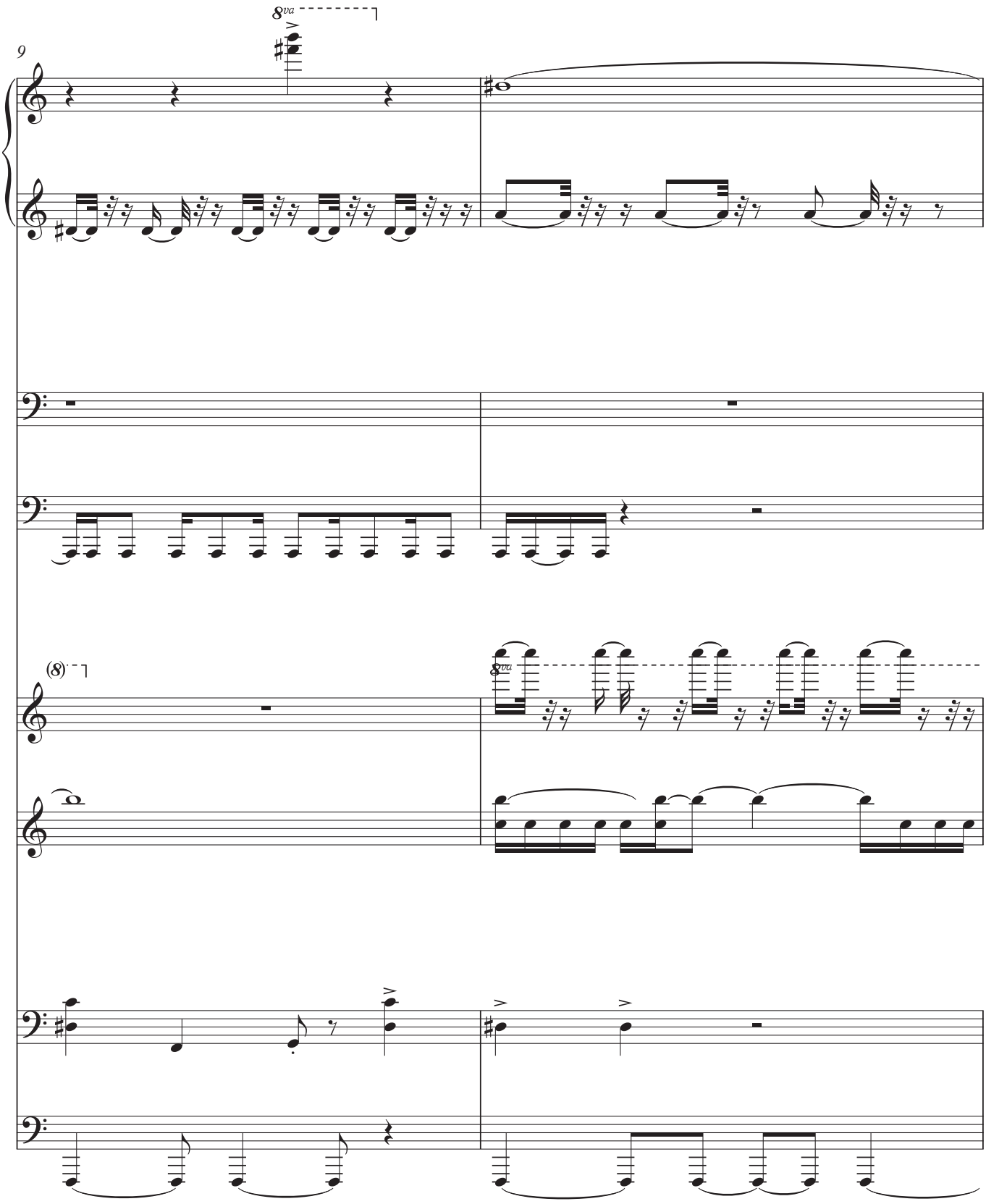
Lorena Mal
Emilio Hinojosa Carrión
[2013-2014]

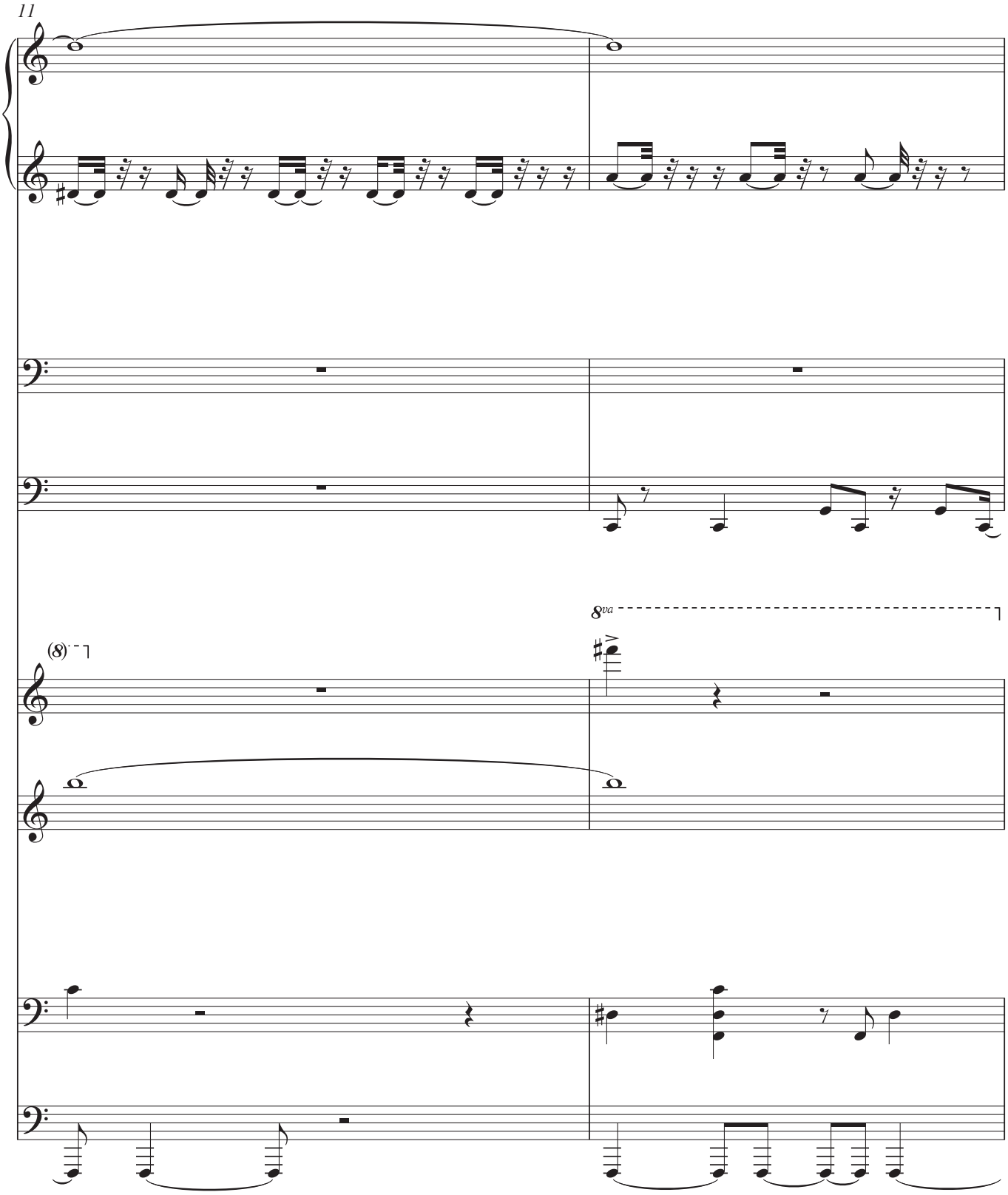


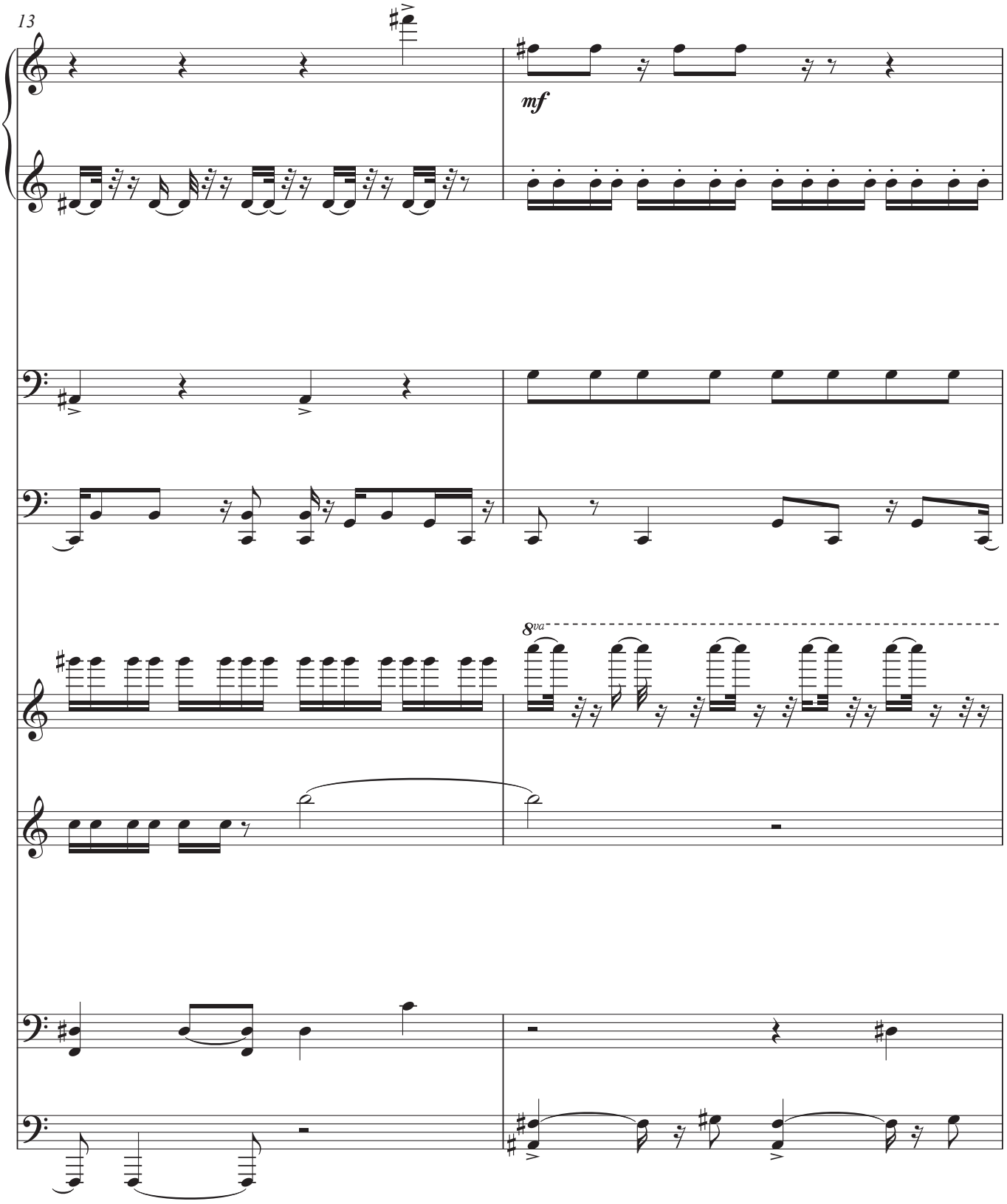

3
f

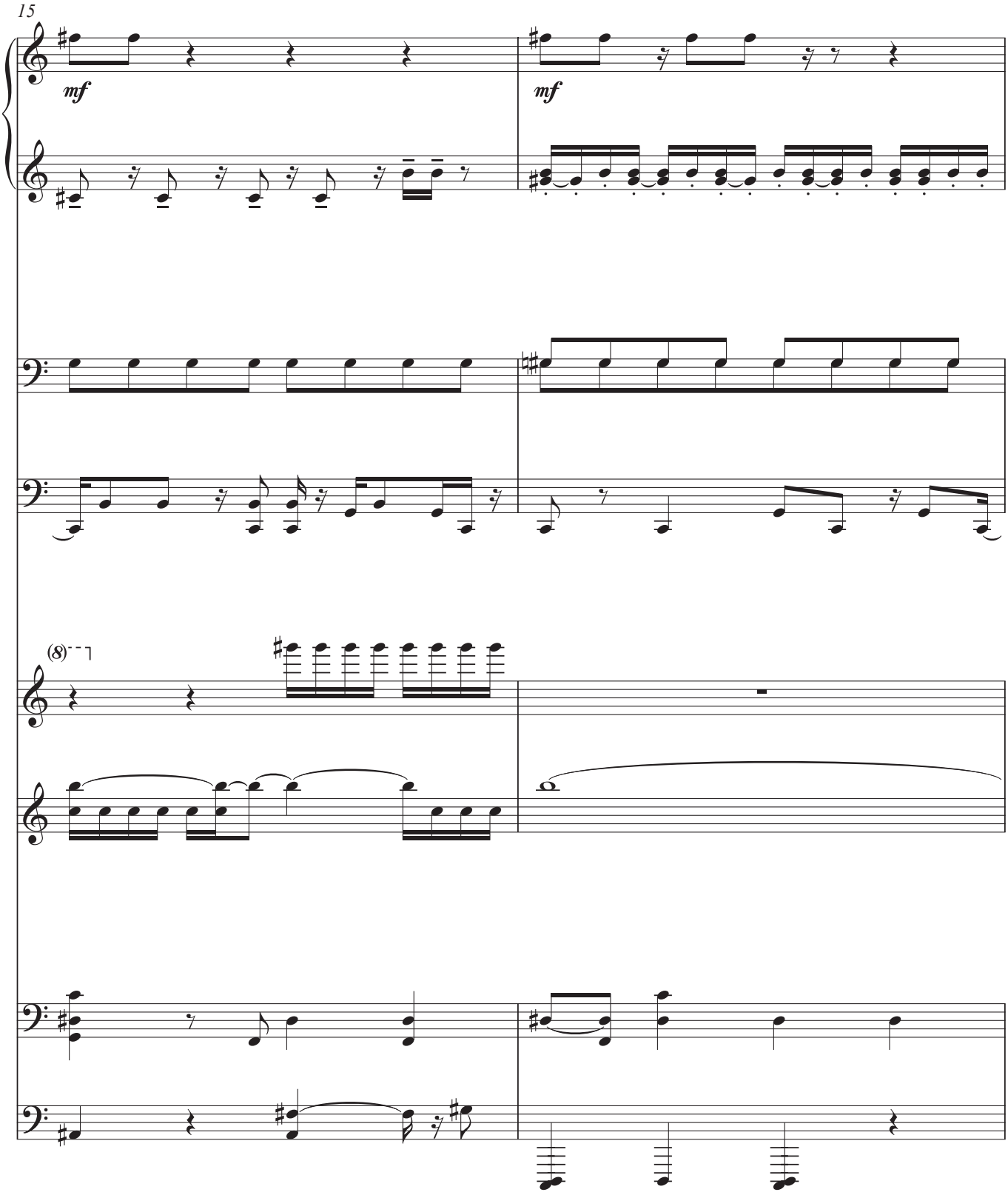

5
mf
mf

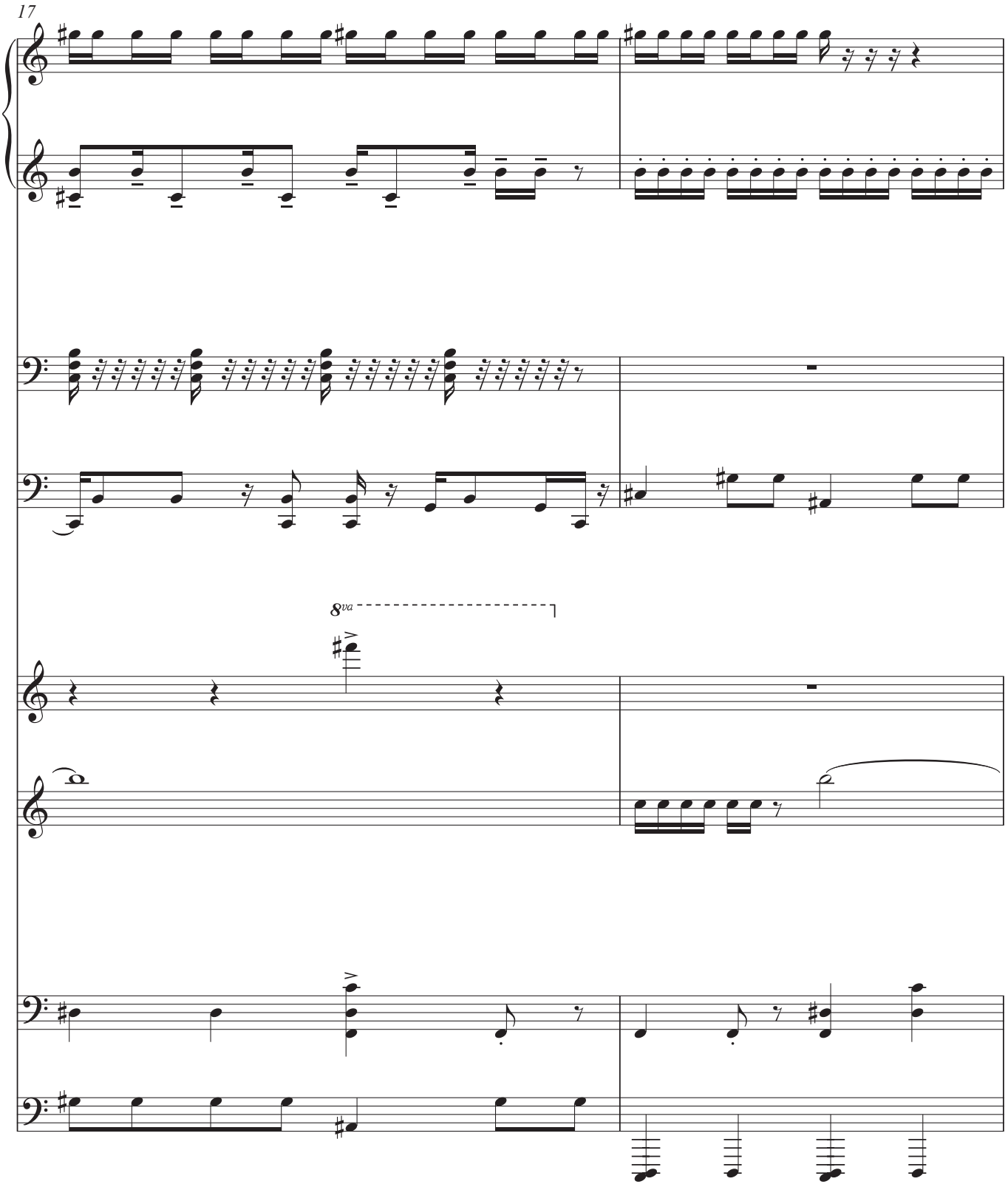

8va
7
mf
mf
8va
mf

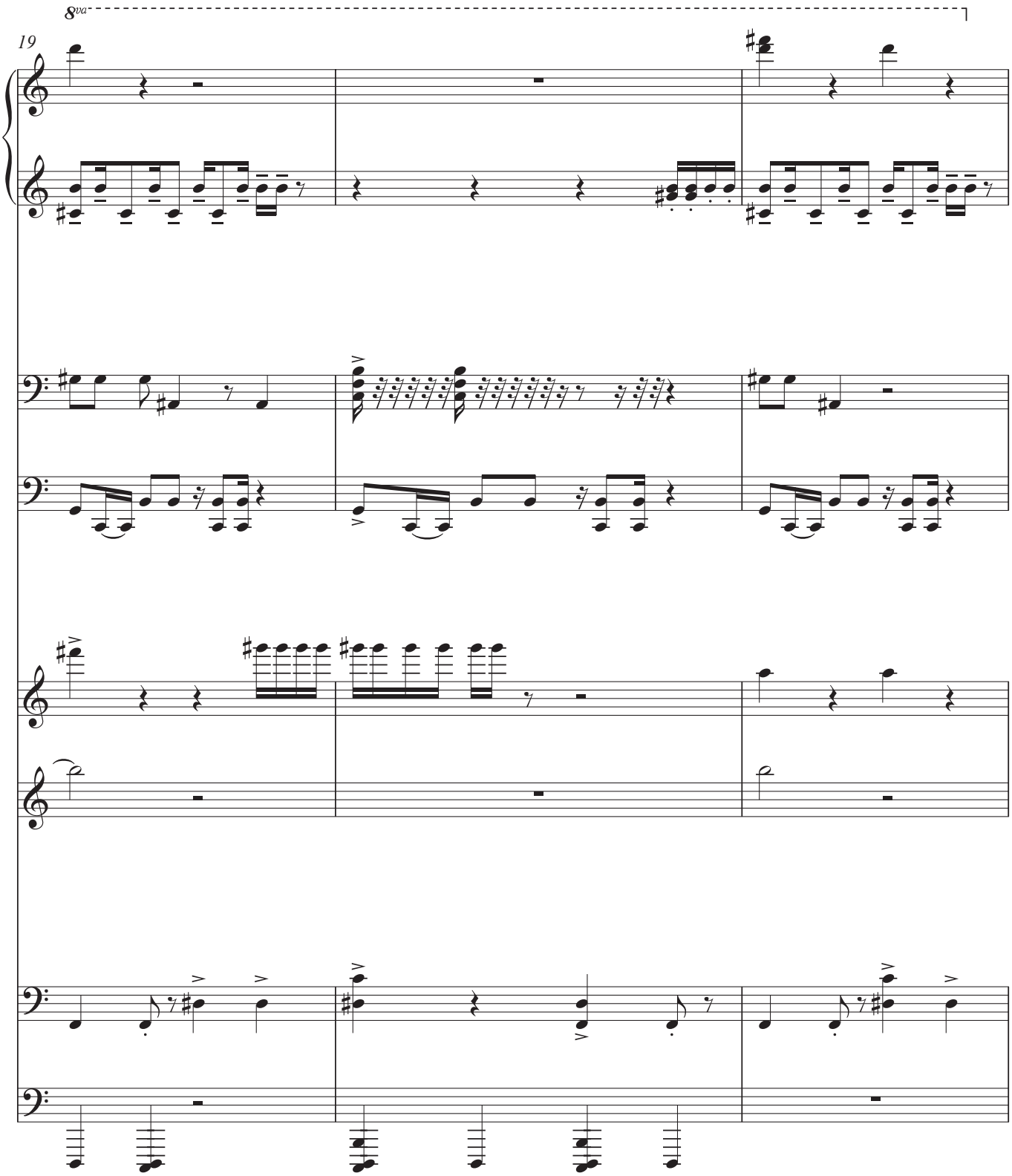

9
8va
(8)
8va

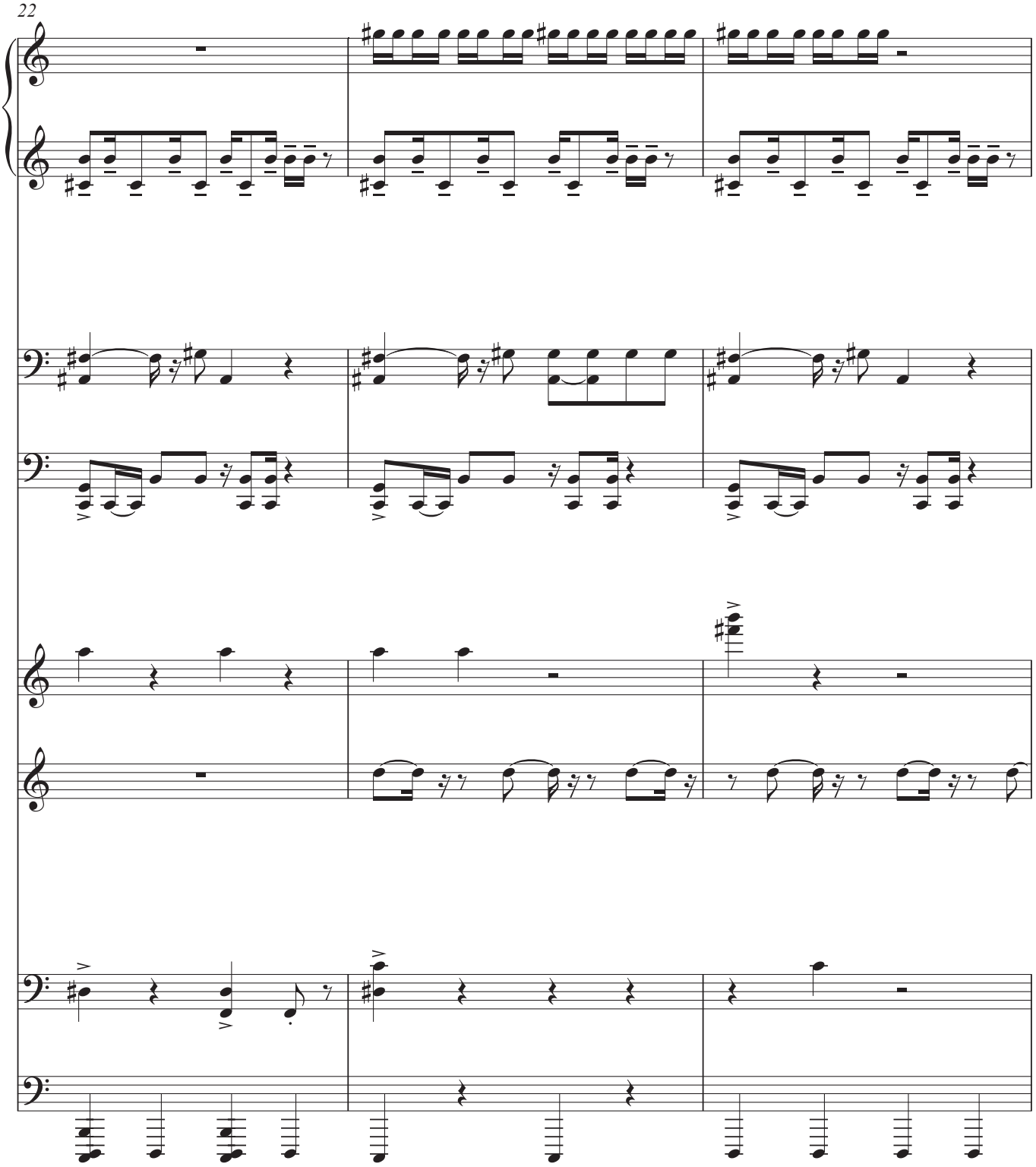

11
8va
(8)

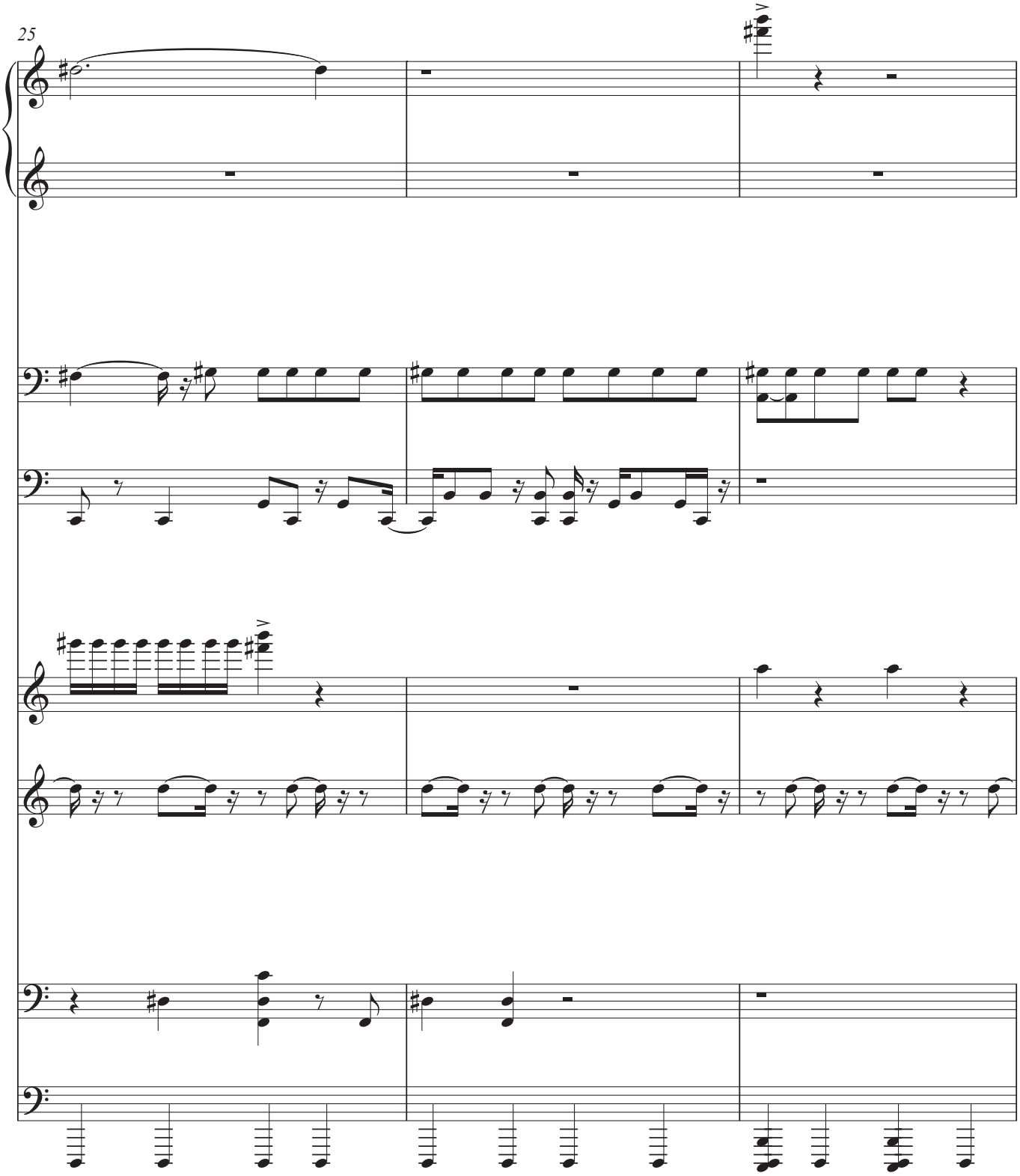

13
mf
8va

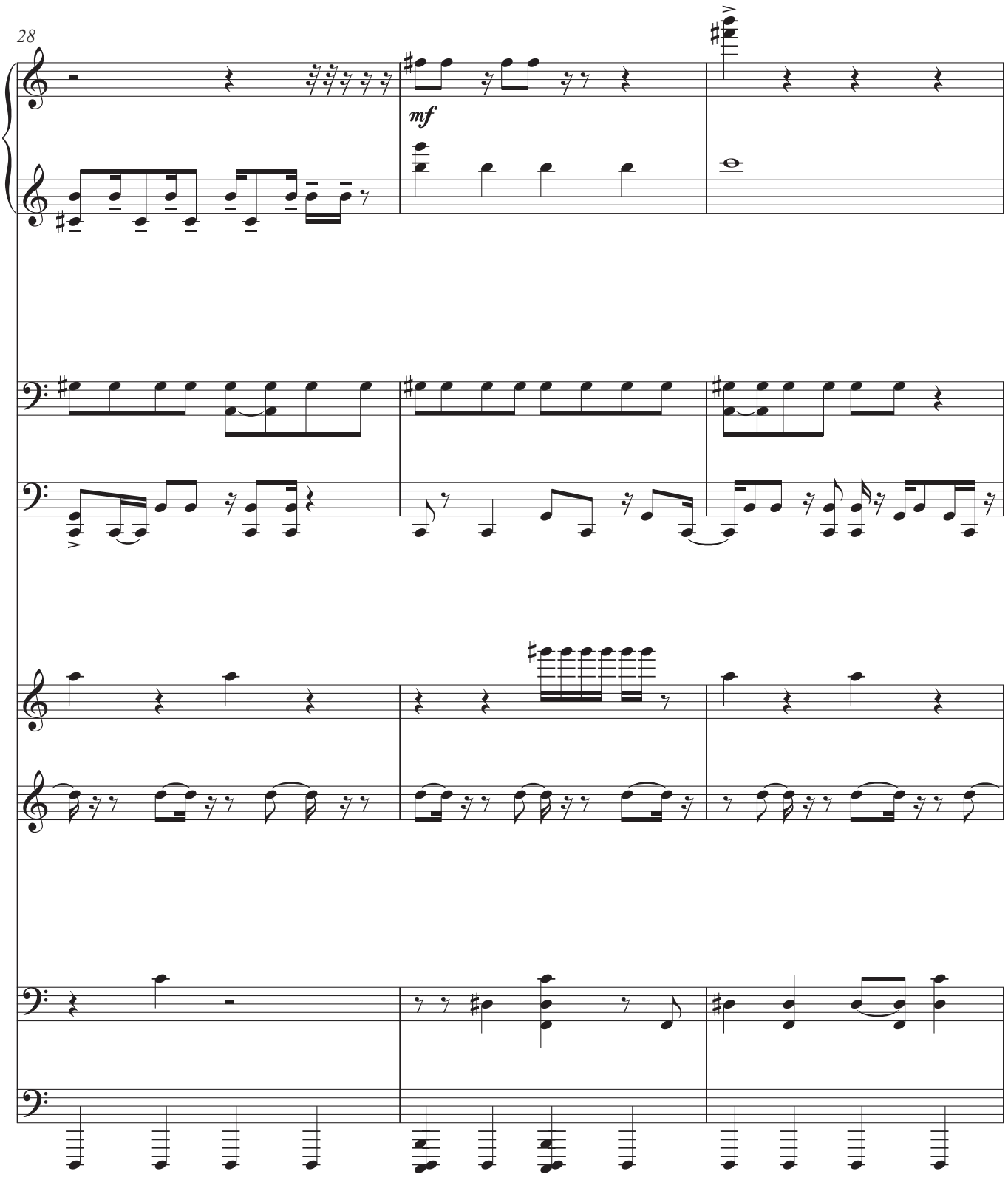

15
mf
mf
(8)

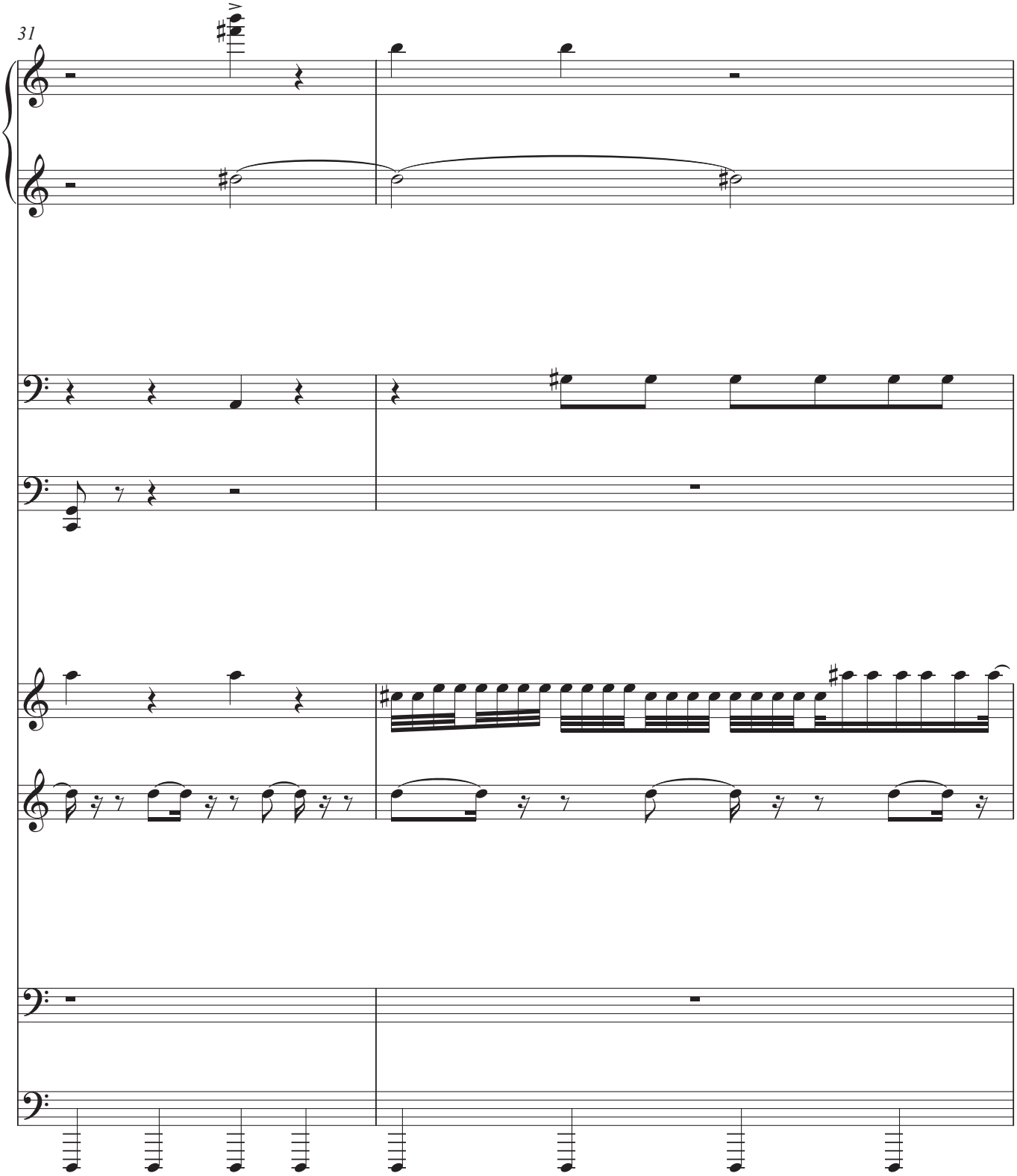

17
8va

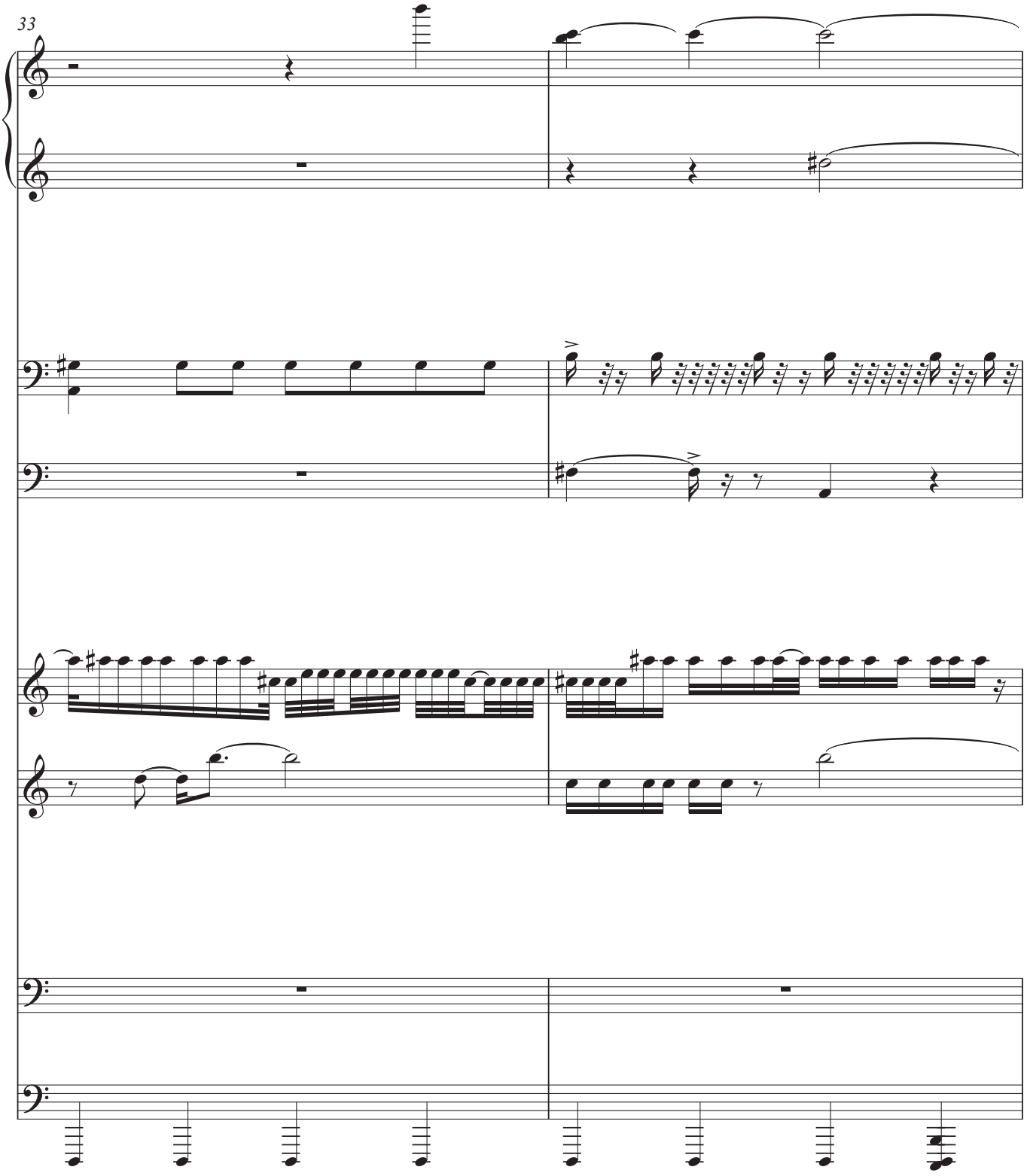

8va
19

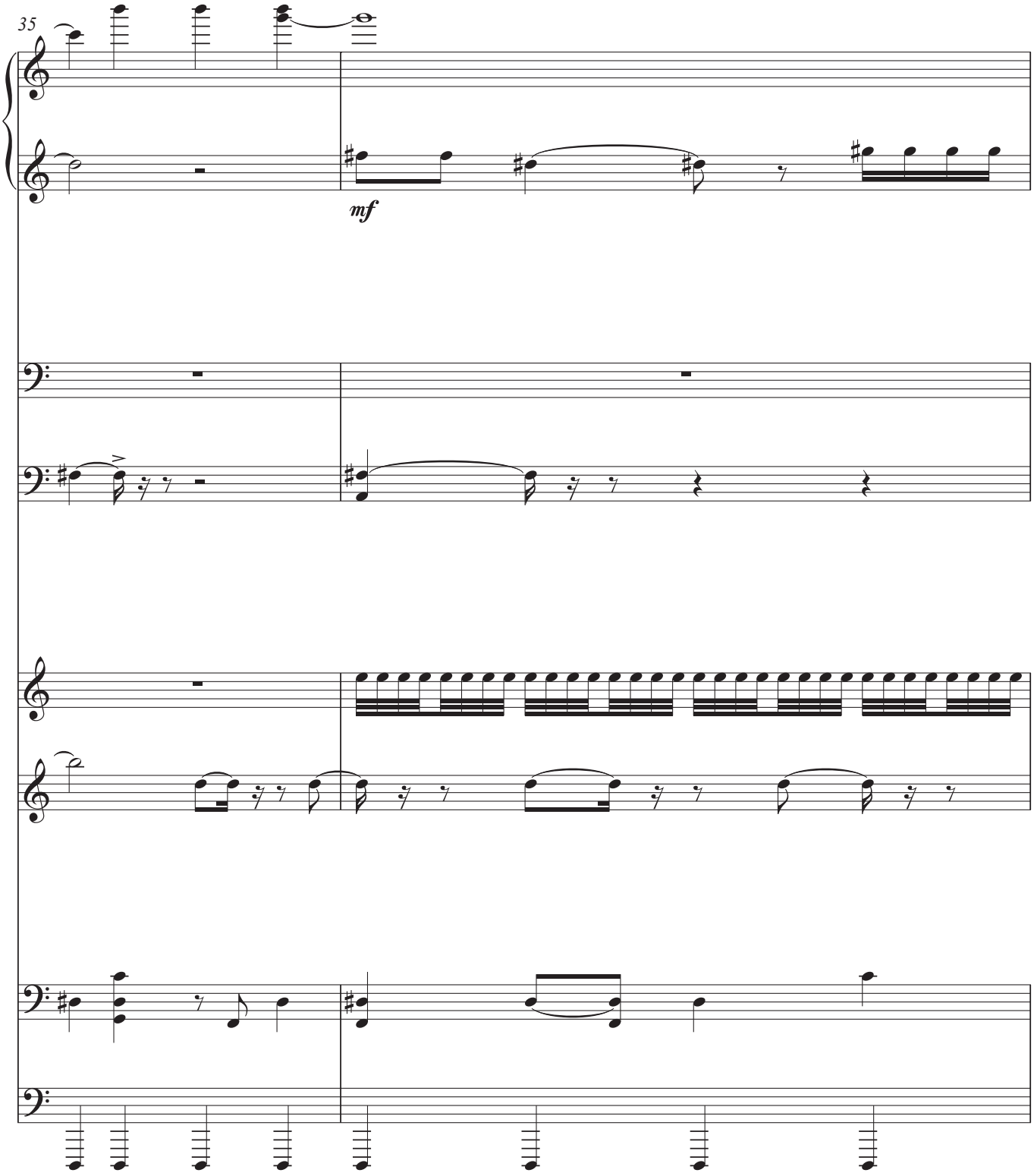

22

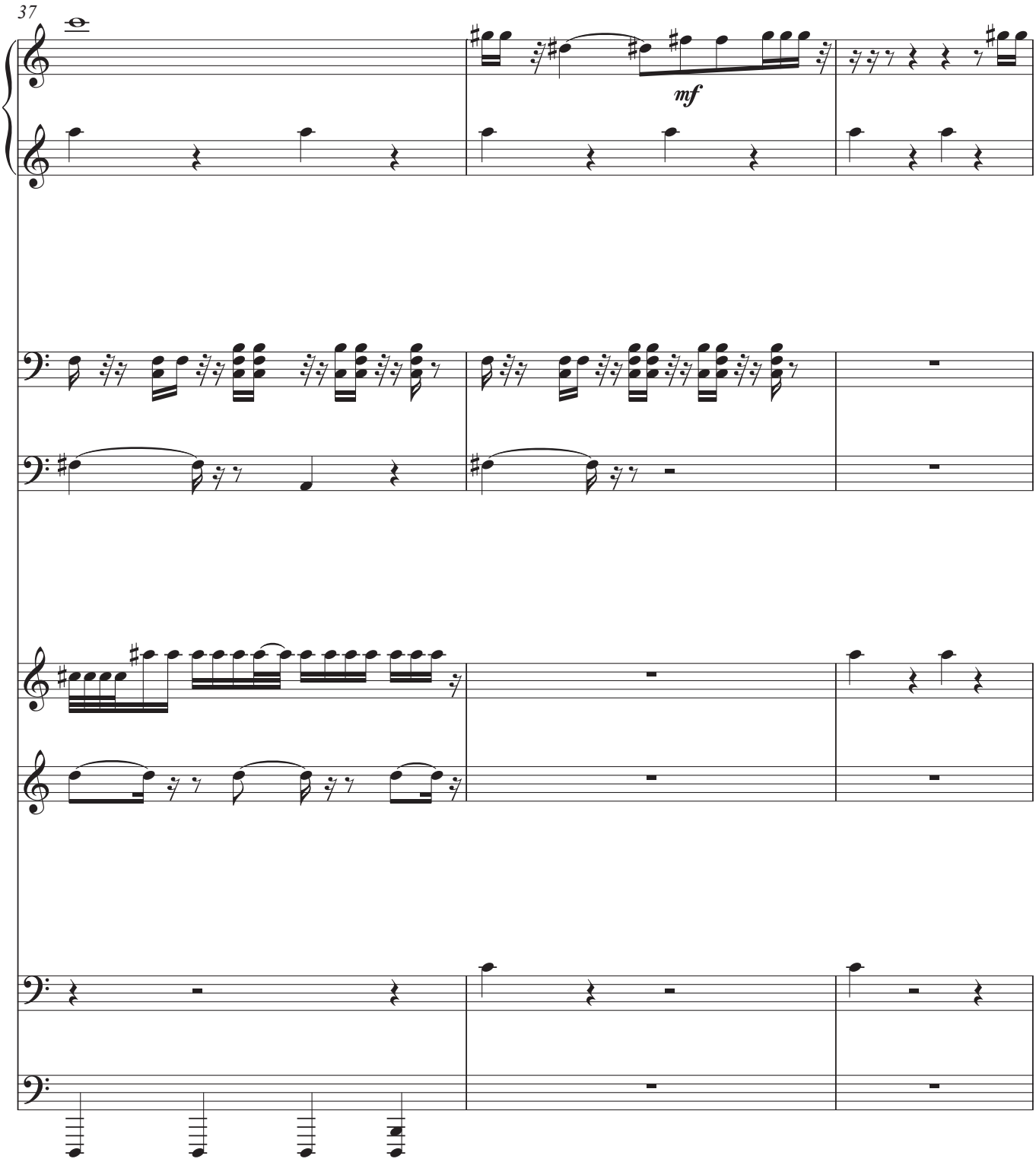

25

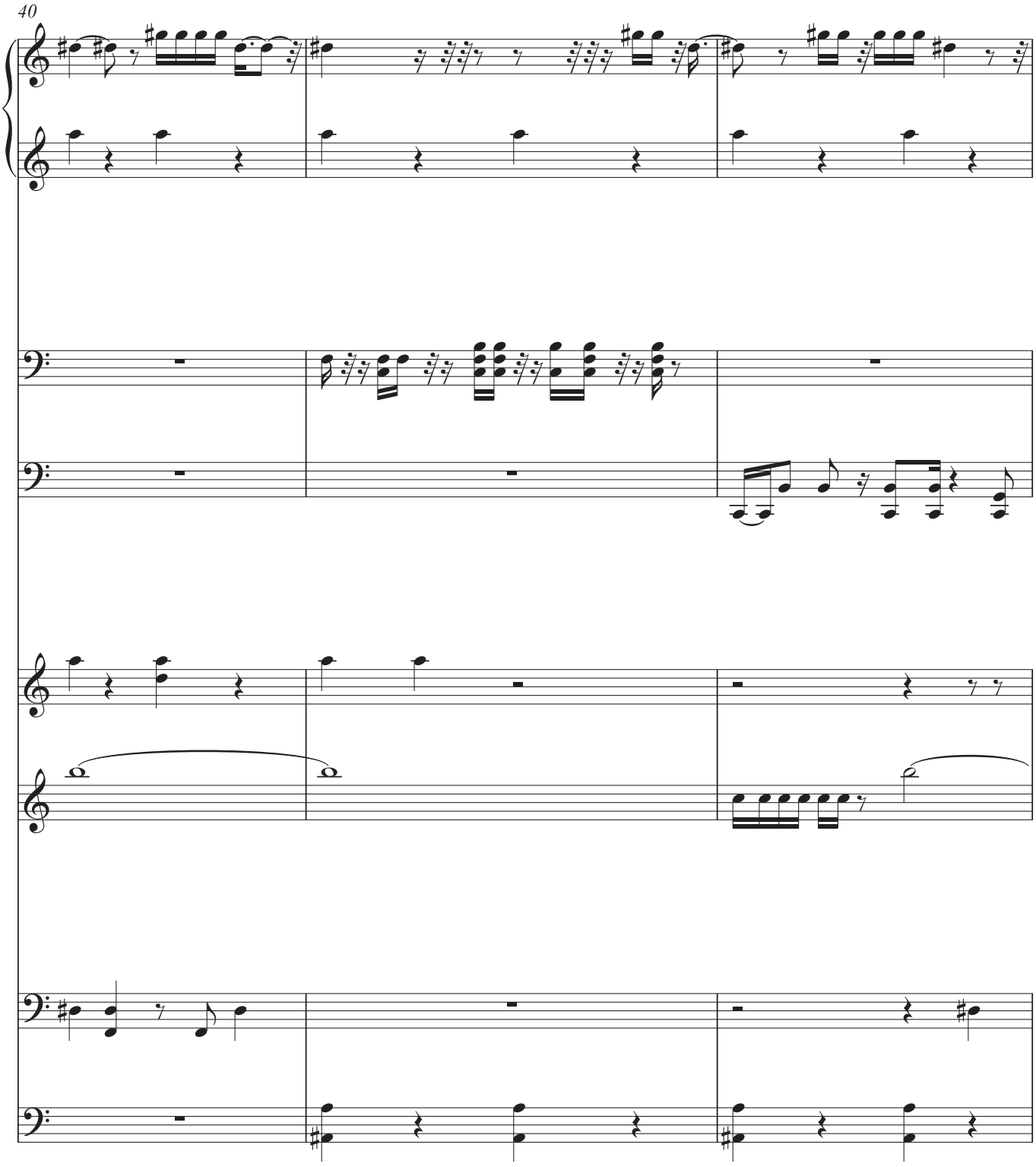

28
mf

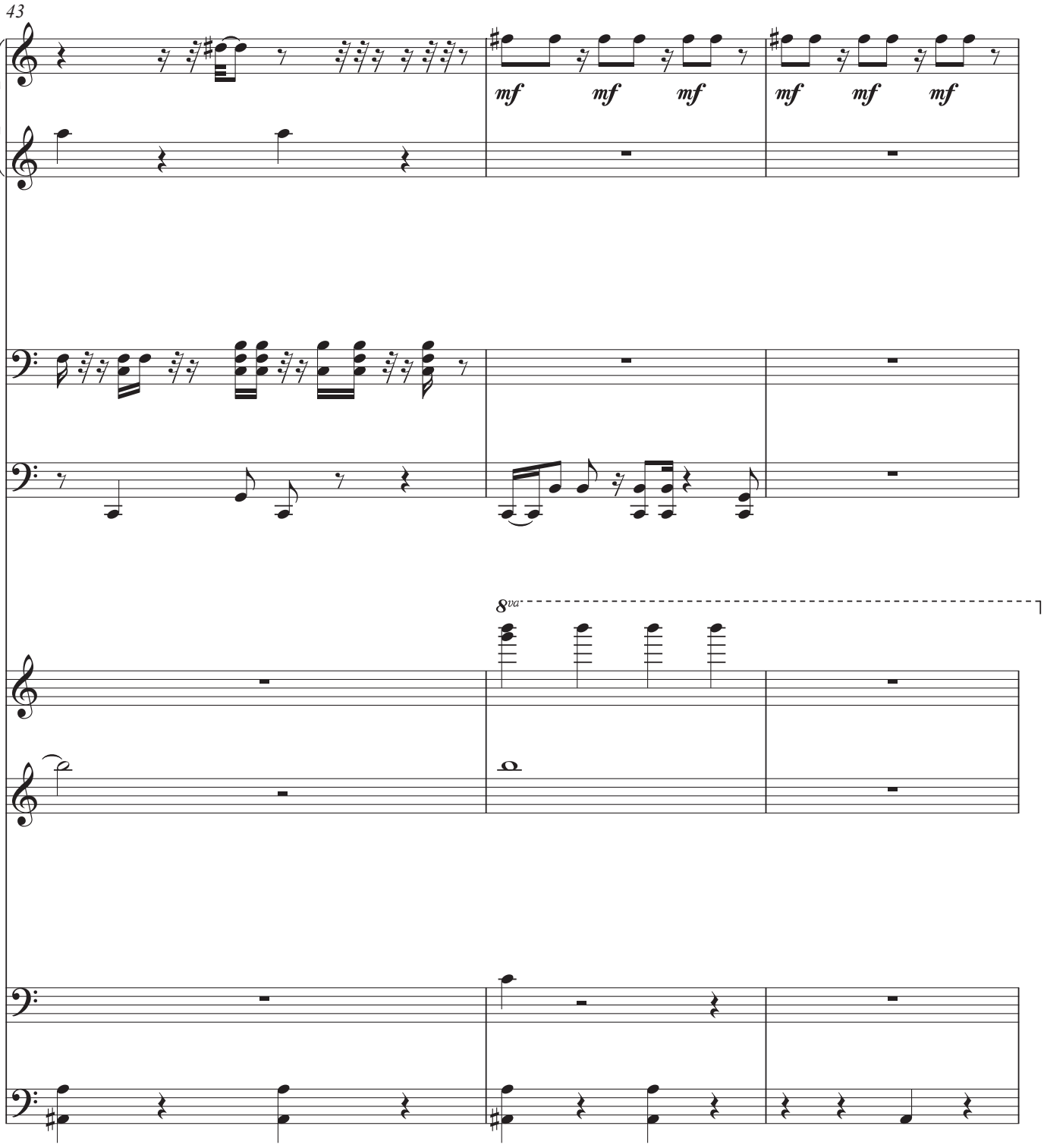

31

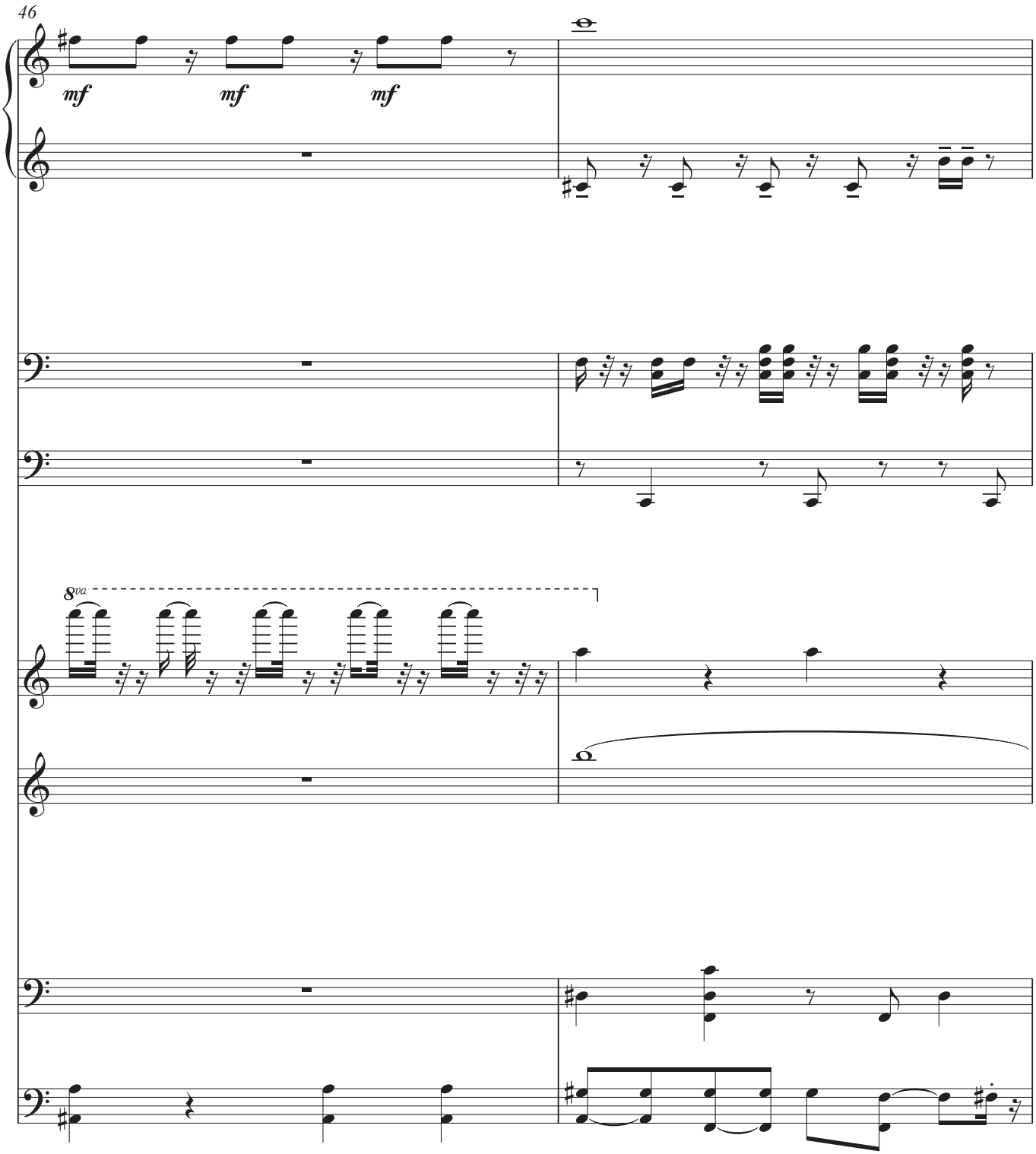

33

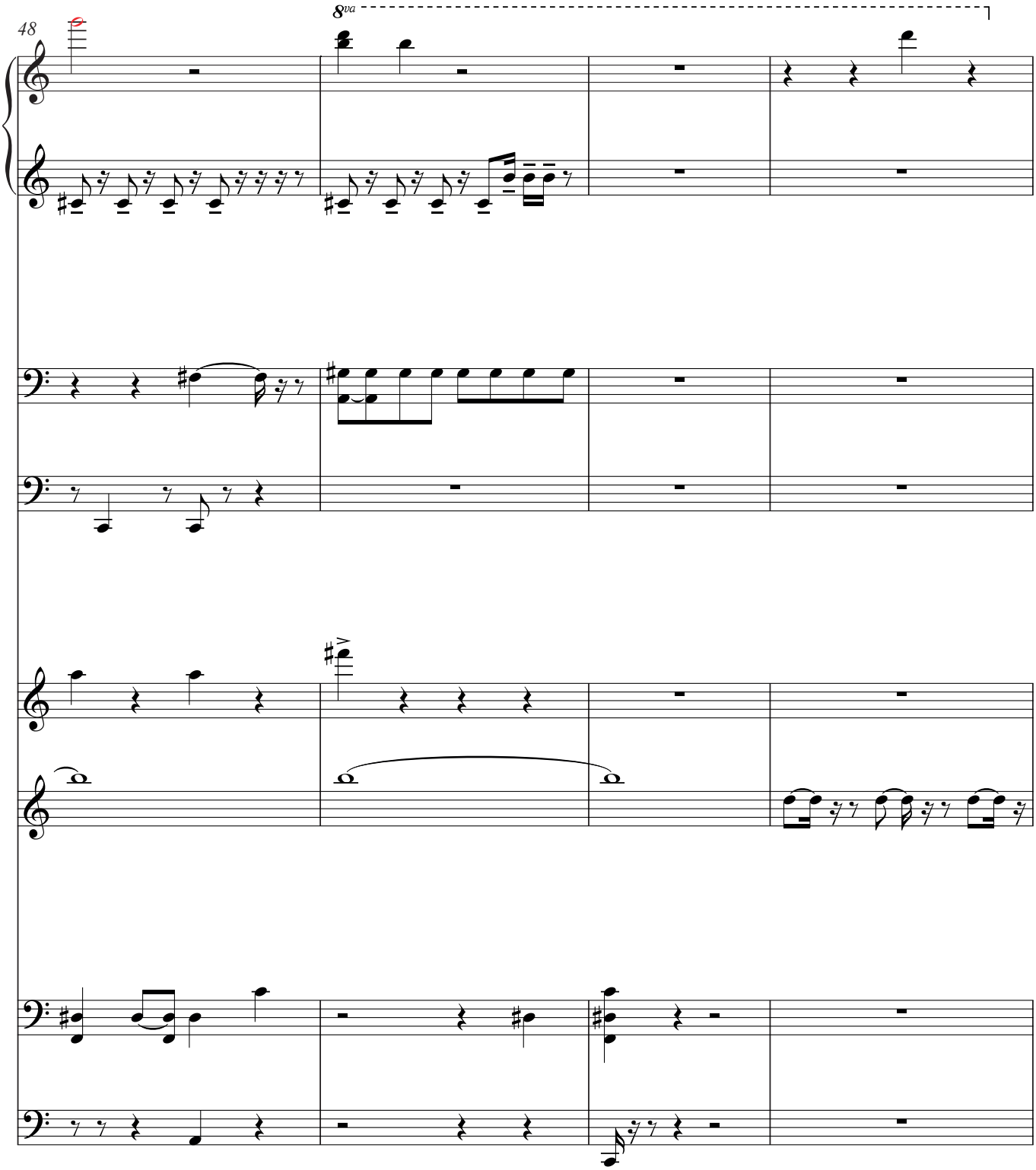

35
mf

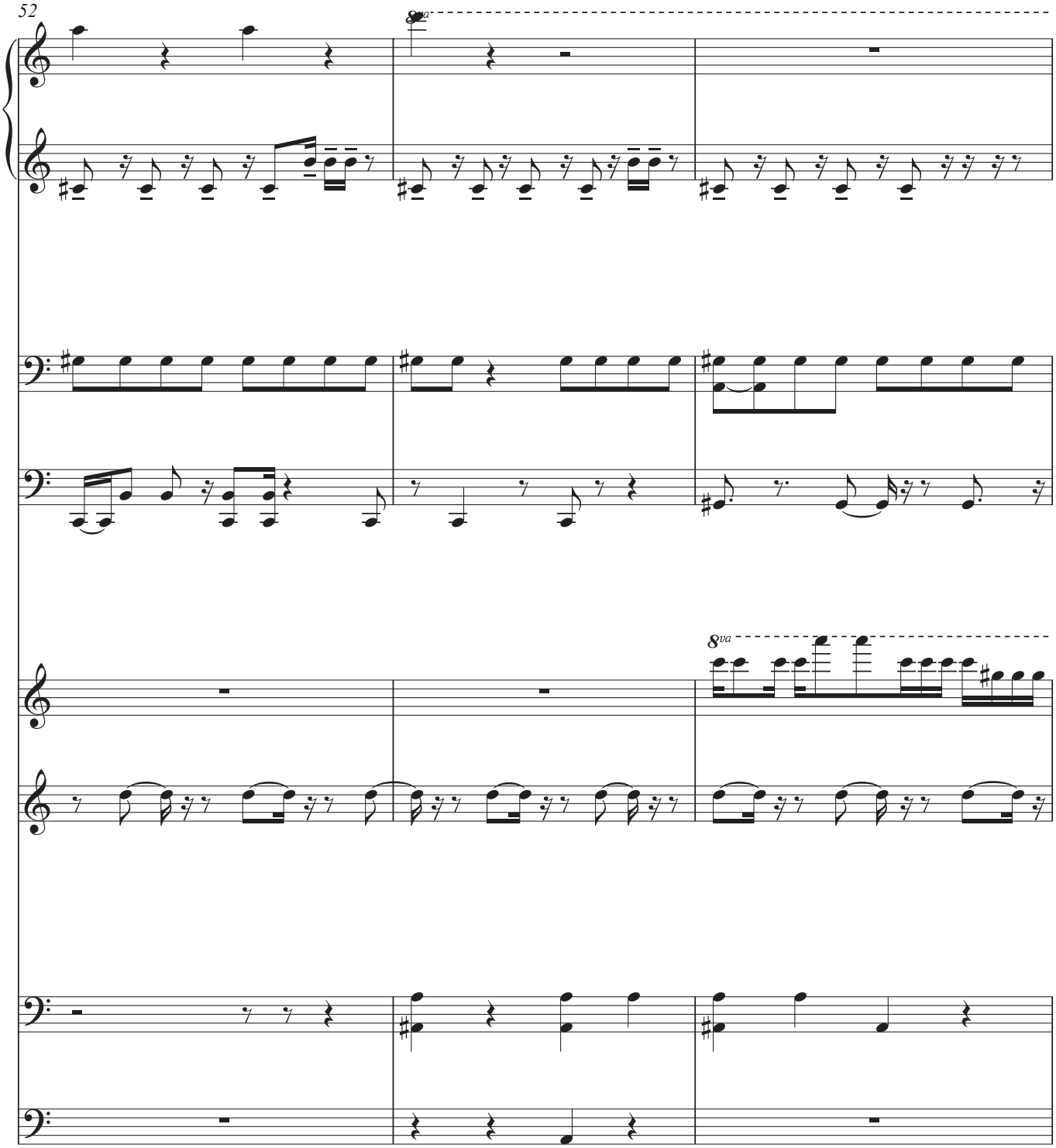

37
mf

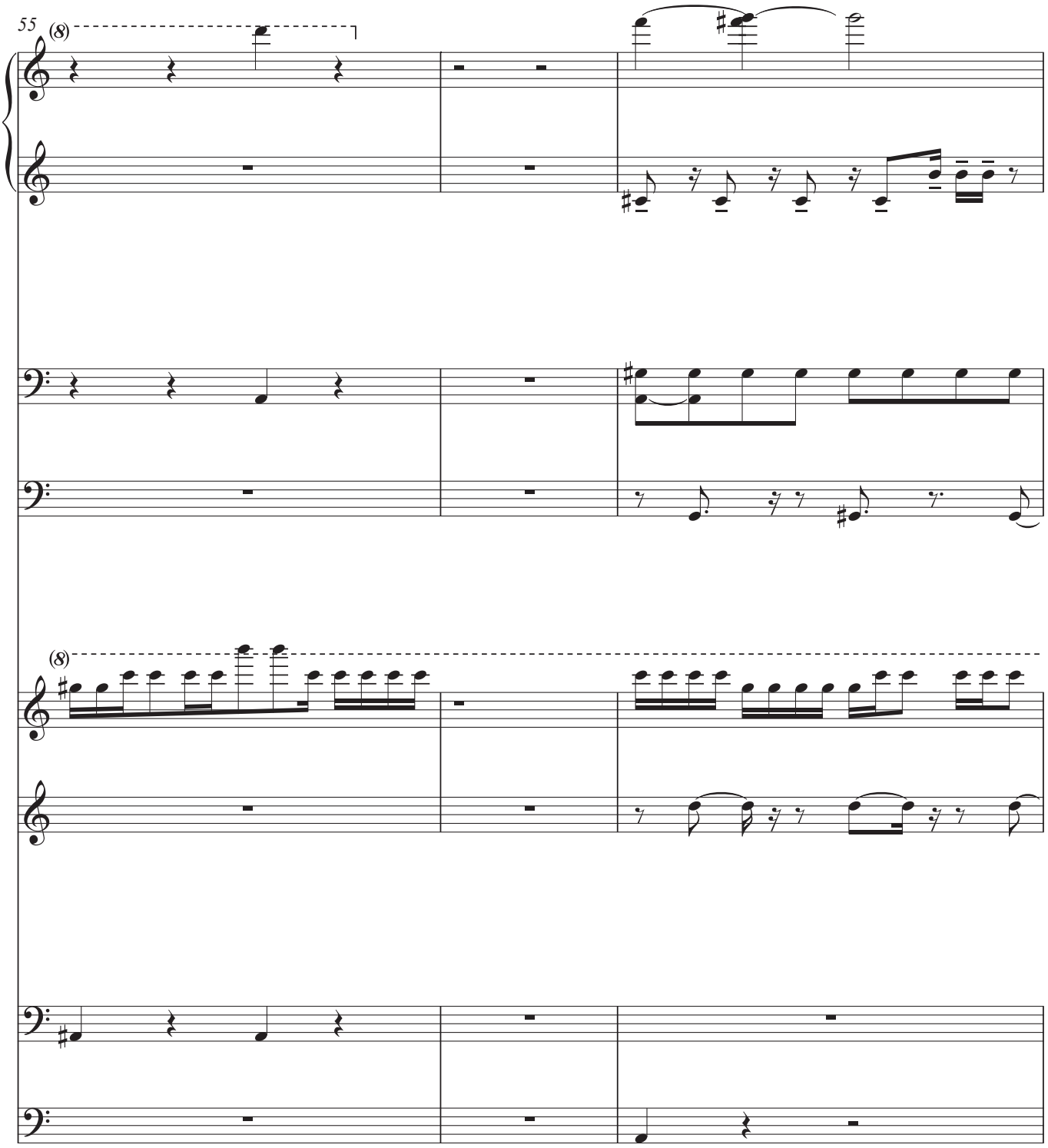

40

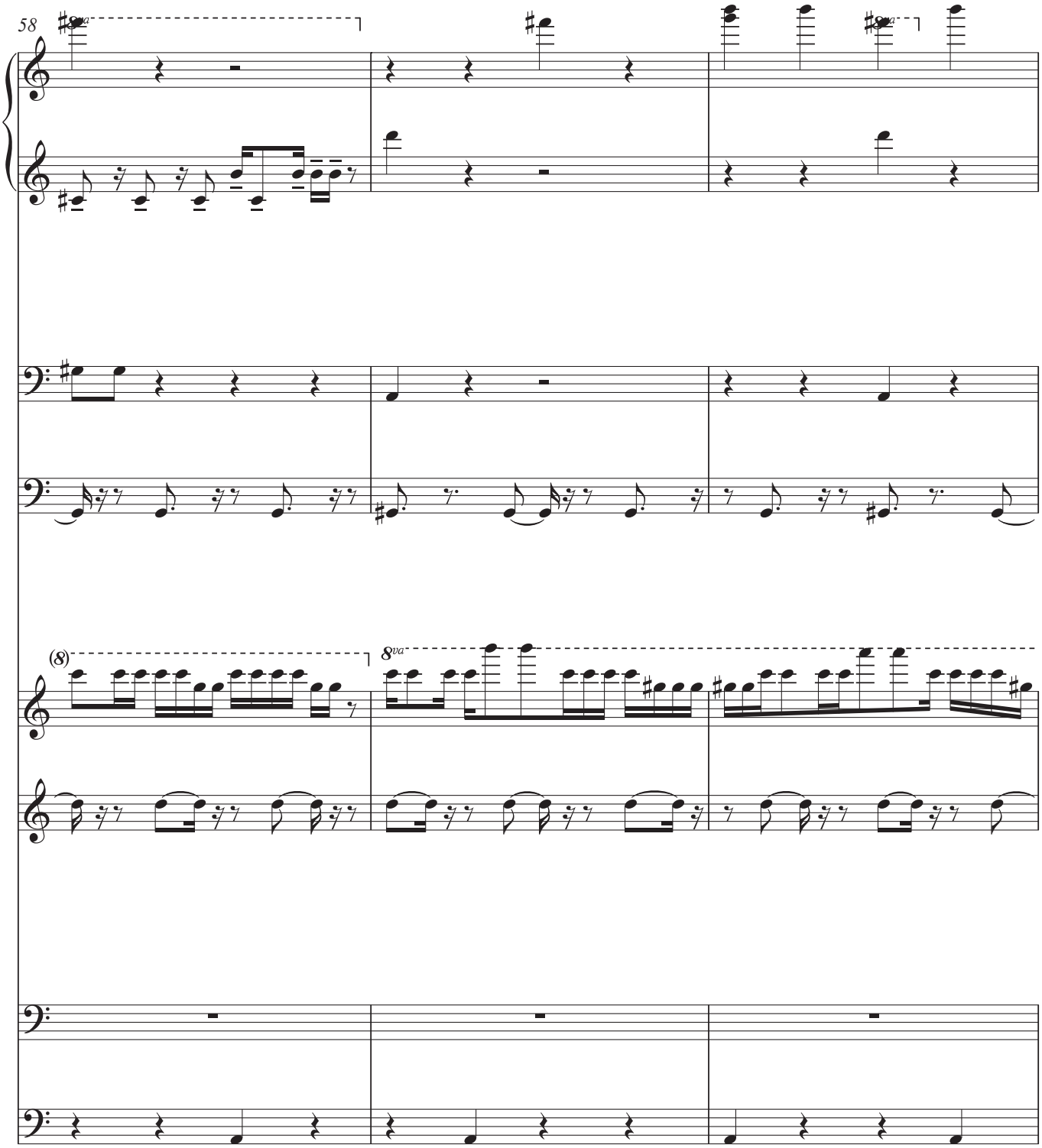

43
mf
mf
mf
mf
mf
mf
8va

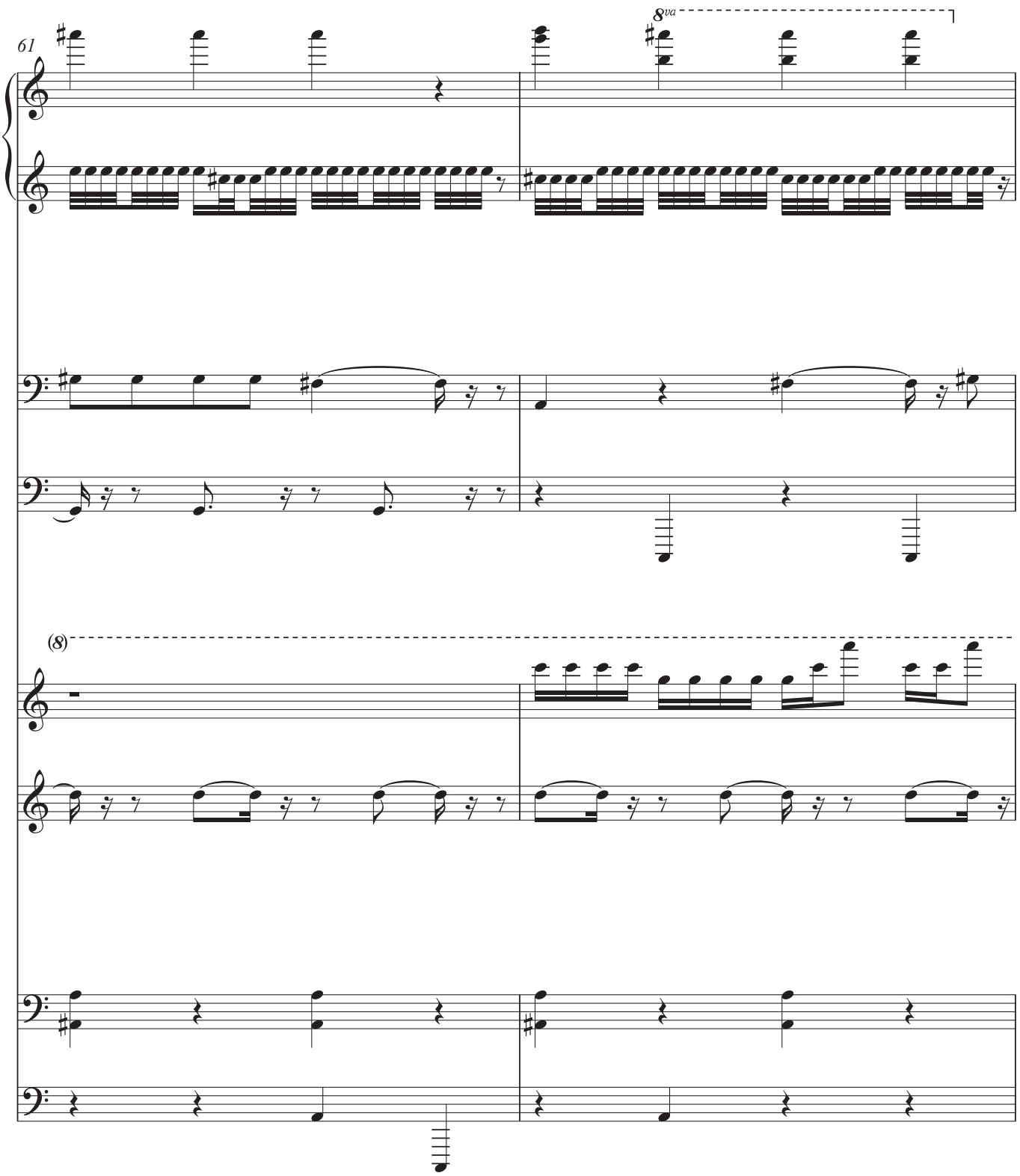

46
mf
mf
mf
8va

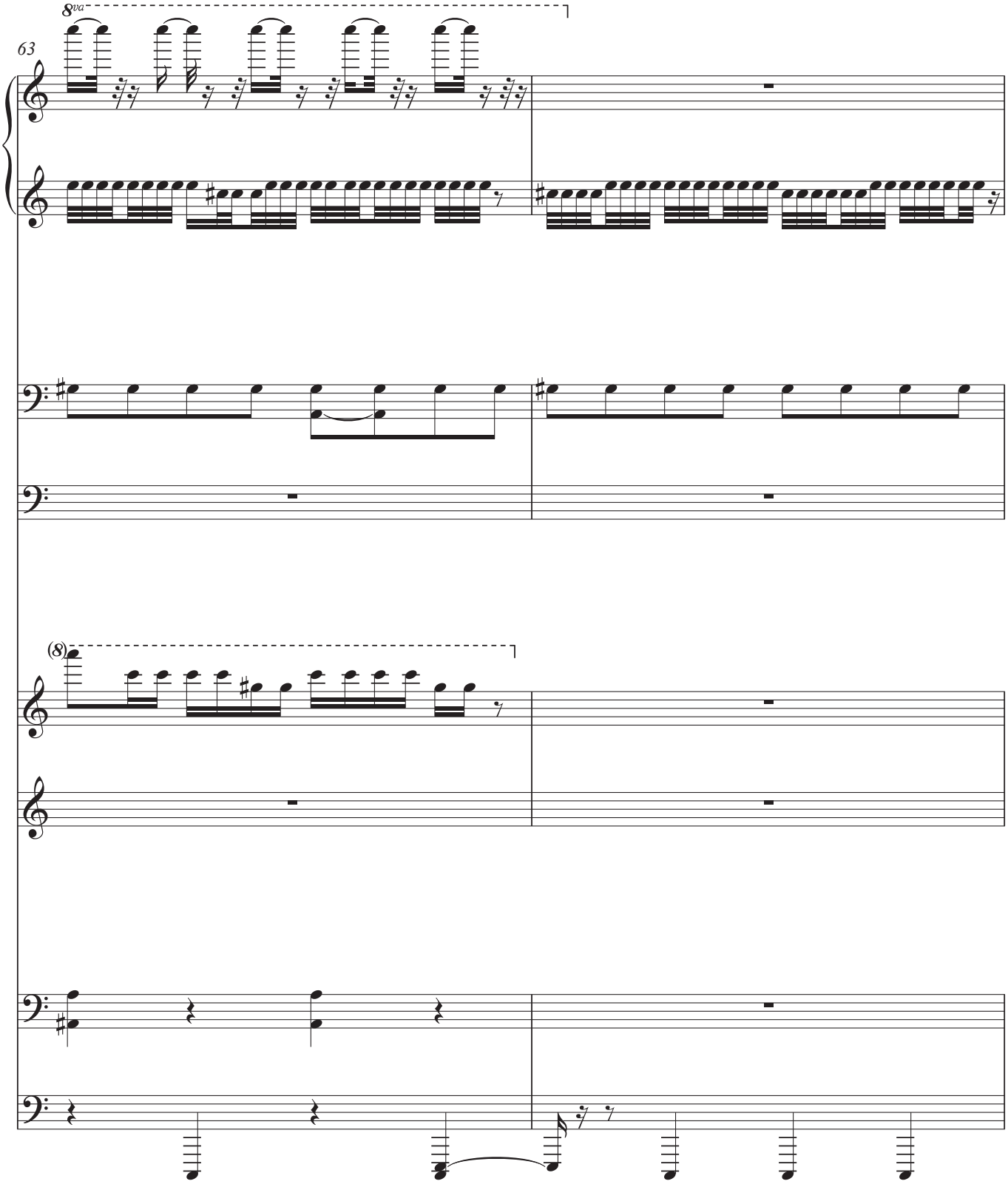

48
8va

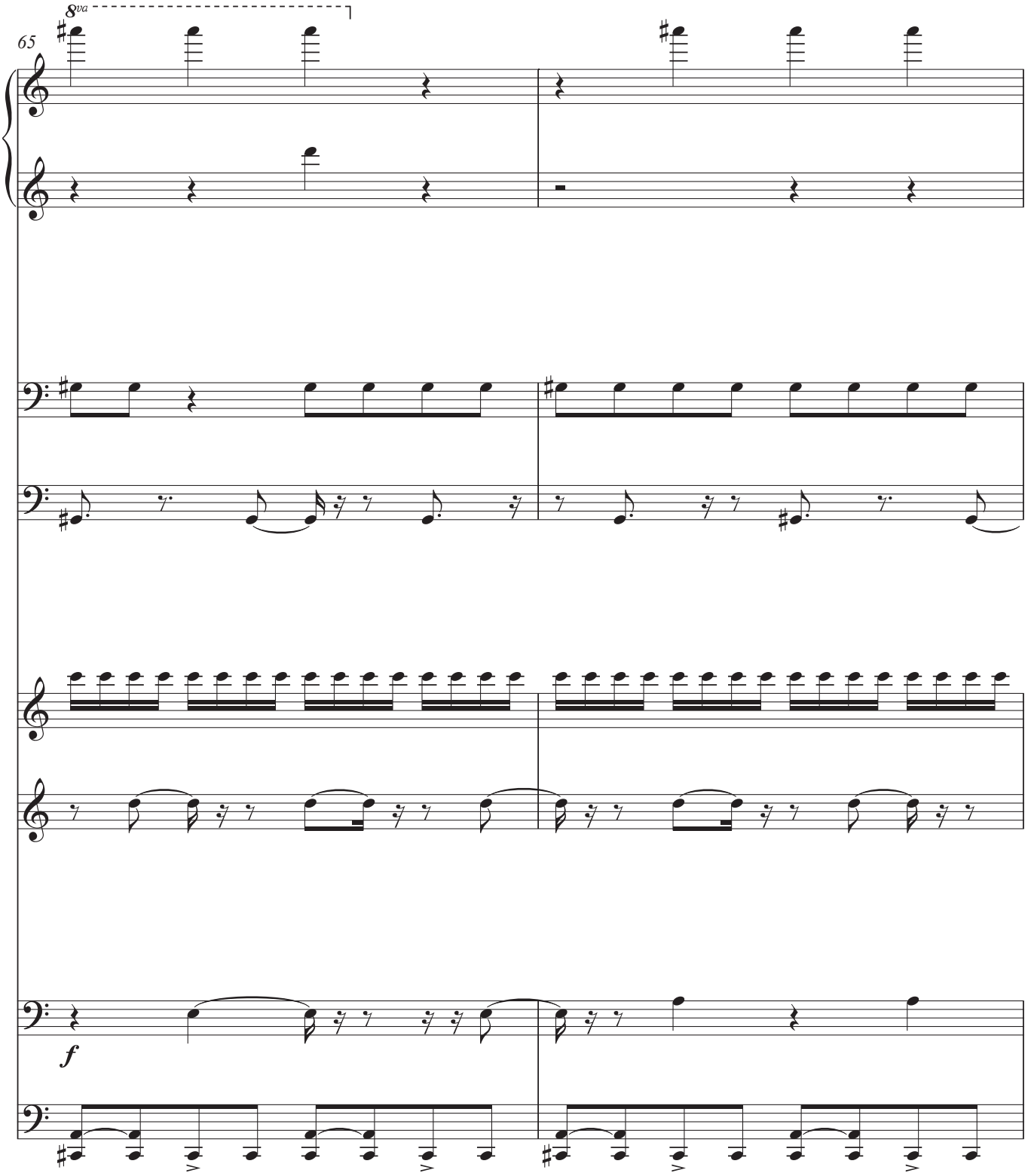

52
8va
8va

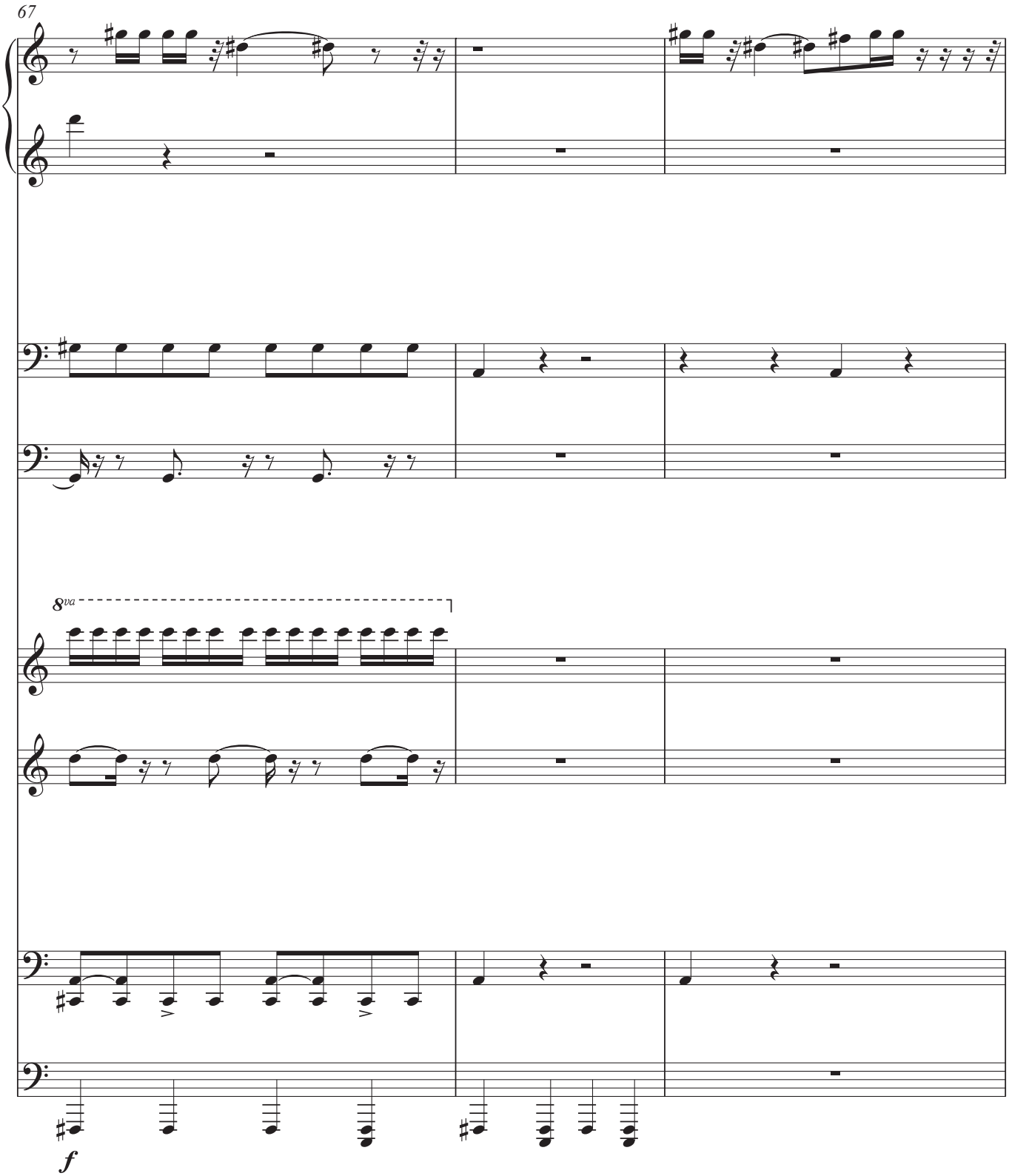

55
(8)
(8)

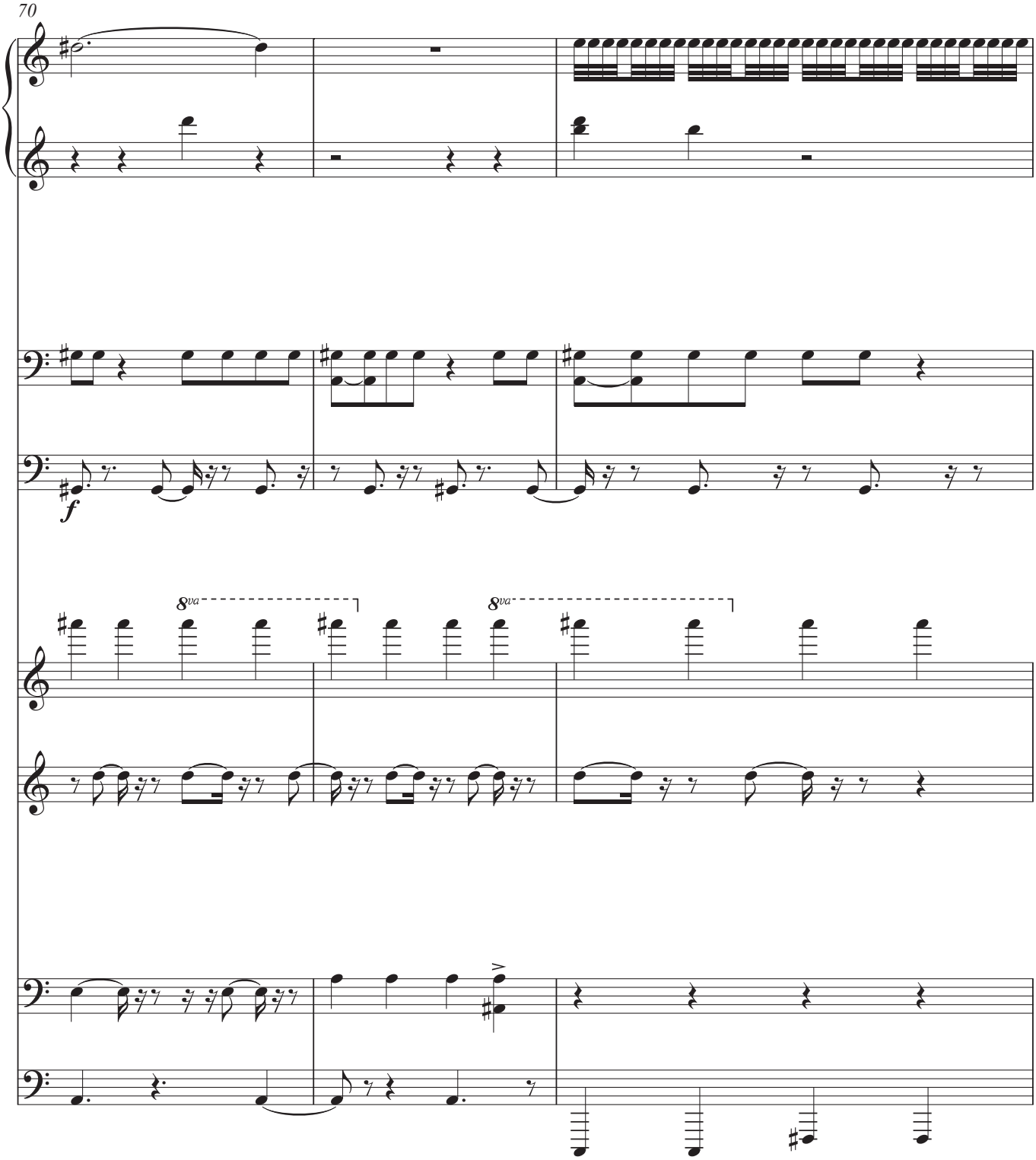

58
8va
8va
8va
(8)
8va

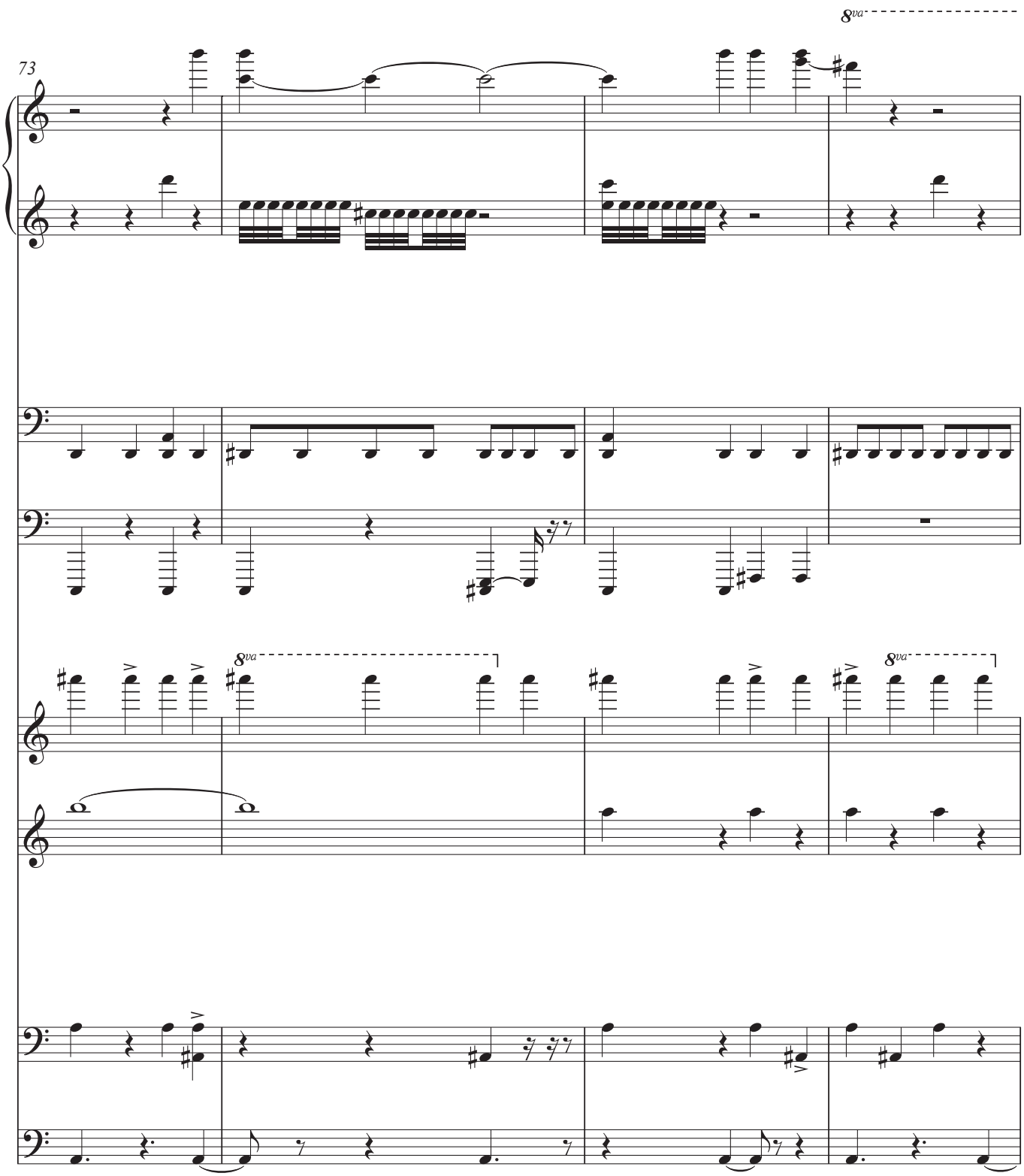

61
8va
(8)

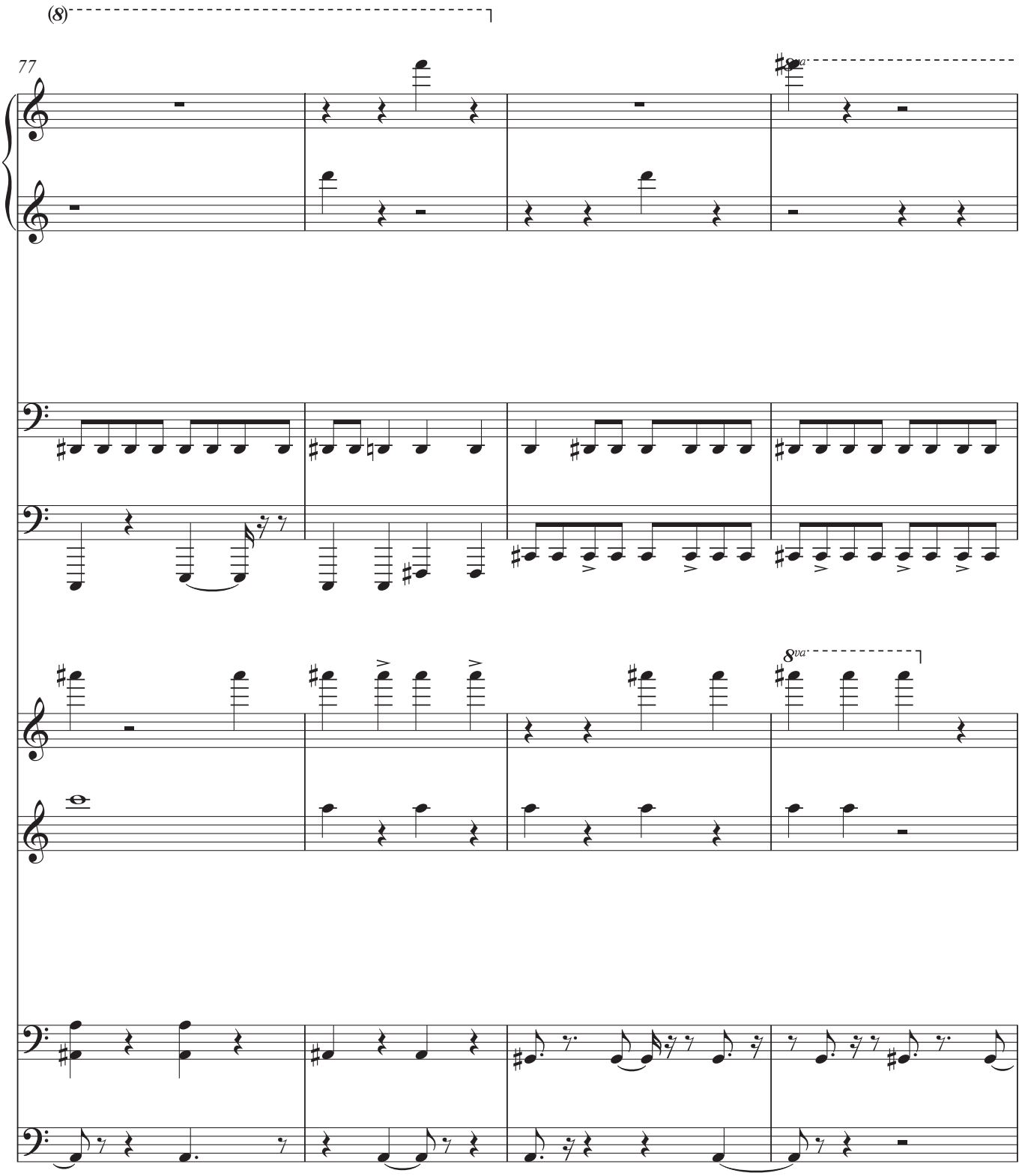

8va
63
(8)

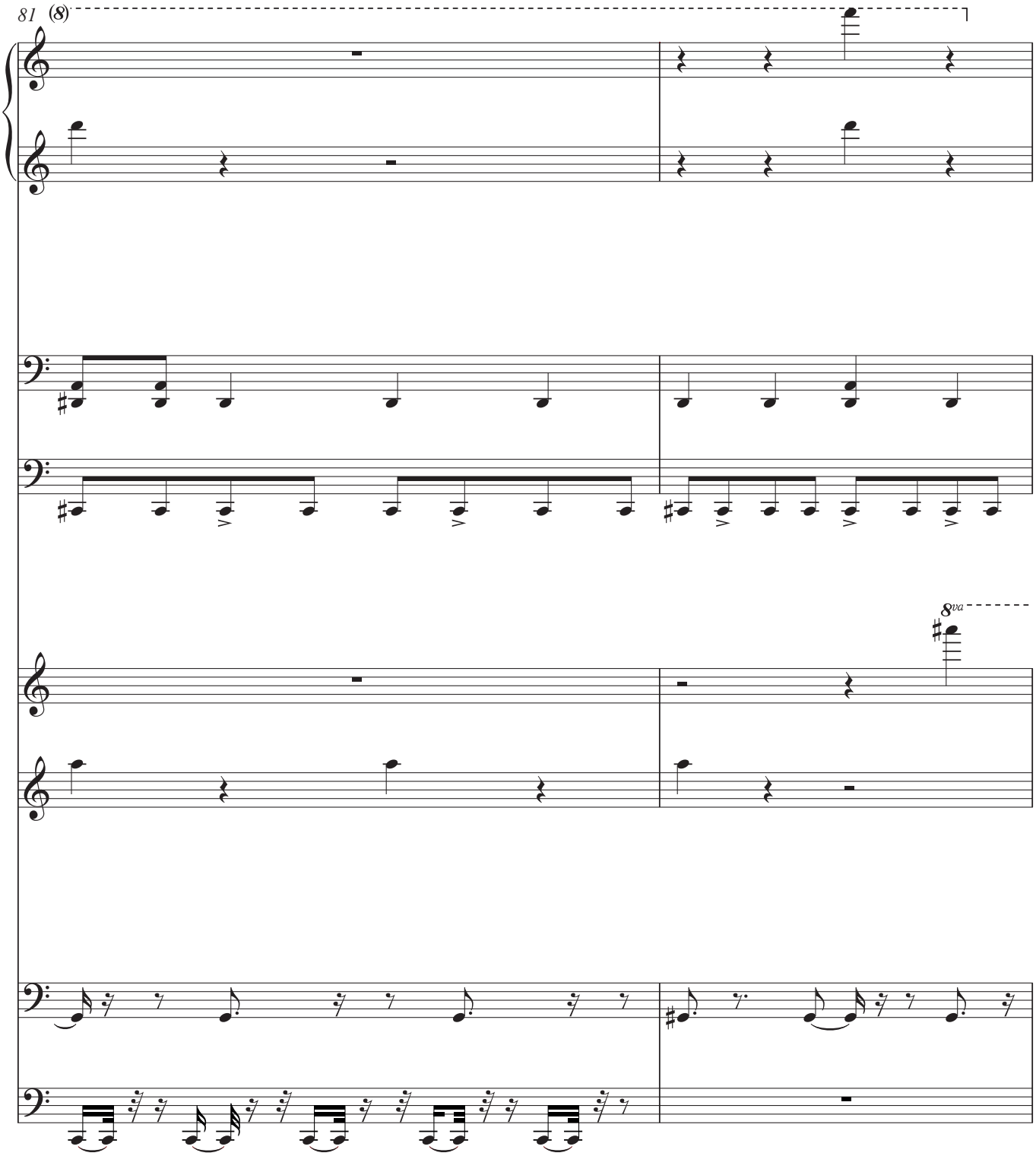

8va
65
f

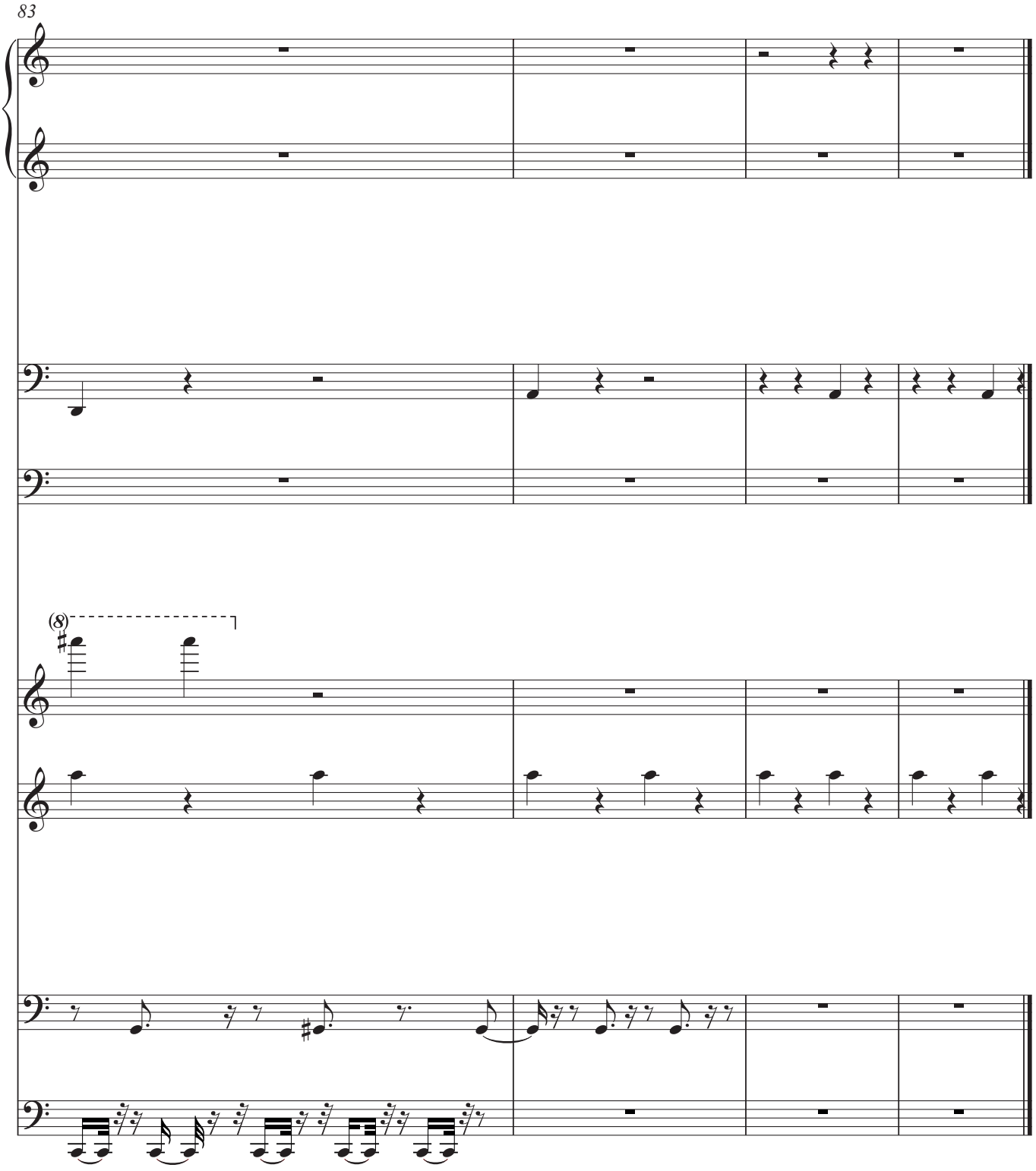

67
8va
f


70
f
8va
8va


8va
73
8va
8va


(8)
77
8va
8va

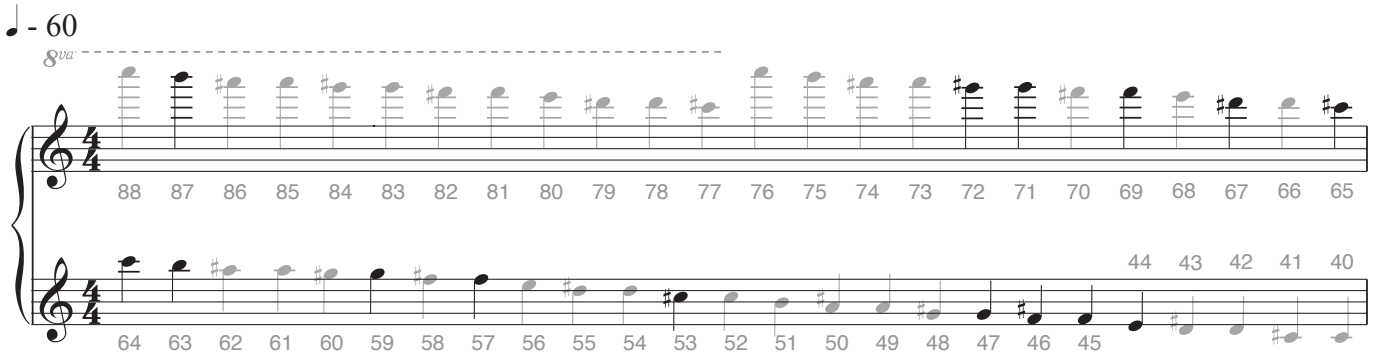

81
(8)
8va


83
(8)

Sincronía

Mapa de datos para movimiento no.3: 'Estado físico en hibernación y sueño ó Larghissimo / Tranquillo'

Estado rítmico cardiaco de hibernación y sueño de 33 especies animales (clave de Sol)



88: Siphonaptera [Pulga, do 9] l s/d
87: Cimex lectularius [Chinche, **si 8**] **l S: 3/4**
86: Lepidoptera [Mariposa, la#8] l s/d
85: Anisoptera [Libelula, la 8] l s/d
84: Hylotrupes bajulus [Polilla, sol#8] l s/d
83: Caelifera [Saltamontes, sol 8] l s/d
82: Pycnogonida [Araña de mar, fa#8] l s/d
81: Achaearanea tepidariorum [Araña, fa 8] l s/d
80: Helix aspersa [Caracol, mi 8] l s/d
79: Mesodesma mactroides [Almeja, re#8] l s/d
78: Mytilus galloprovincialis [Mejillón, re 8] l s/d
77: Podarcis hispanicus [Lagartija, do#8] l s/d
76: Caridea [Camarón, do 8] l s/d
75: Palinurus elephas [Langosta, si 7] l s/d
74: Carcinus maenas [Cangrejo, la#7] l s/d
73: Salamandra [Salamandra, la 7] l s/d
72: Trochilinae [Colibrí, **sol#7**] **l S: 1/16 1/32**
71: Rattus norvegicus [Rata, **sol 7**] **l S: c**
70: Asteroidea [Estrella de mar, fa#7] l s/d
69: Passer domesticus [Gorrión, **fa 7**] **l S: c**
68: Pelophylax perezi [Rana, mi 7] l s/d
67: Bufo bufo [Sapo, **re #7**] **l S: 12/4**
66: Serpentes [Serpiente, re 7] l s/d
65: Didelphimorphia [Zarigüeya, **do #7**]
l S: 1/16 1/32 1/64
64: Suncus murinus [Musaraña, **do 7**] **l S: c**
63: Corynorhinus townsendii [Murciélago, **si 6**] **l H: 2/4 1/6 1/32, S: c**
62: Columba livia [Paloma, la#6] l s/d
61: Iguanidae [Iguana, la 6] l s/d
60: Mustela putorius furo [Hurón, sol#6] l s/d
59: Erinaceinae [Erizo, **sol 6**] **l H: 12/4, S: 1/16 1/32 1/64**
58: Thunnus [Atún, fa#6] l s/d
57: Oryctolagus cuniculus [Conejo, **fa 6**] **l S: 1/8**
56: Nothura maculosa [Perdice, mi 6] l s/d
55: Melopsittacus undulatus [Perico, re#6] l s/d
54: Gallus gallus domesticus [Gallina, re 6] l s/d
53: Anas platyrhynchos domesticus [Pato, **do#6**]
l S:1/8
52: Anser anser [Ganso, do 6] l s/d
51: Falco peregrinus [Halcón, si 5] l s/d
50: Accipitridae [Águila, la#5] l s/d
49: Grus grus [Cisne, la 5] l s/d
48: Felis silvestris catus [Gato, sol#5] l s/d
47: Erethizon dorsatum [Puercoespín, **sol 5**] **l H: 12/4**
46: Dasypodidae [Armadillo, **fa#5**] **l S:1/8**
45: Talpa europaea [Topo, **fa 5**] **l S: 1/4**
44: Marmota marmota [Marmota, **mi 5**] **l H: 15/4**
43: Strigidae [Buho, re #5] l s/d
42: Ornithorhynchus anatinus [Ornitorrinco, re 5] l s/d
41: Pelecanus onocrotalus [Pelicano, do #5] l s/d
40: Testudines [Tortuga, do 5] l s/d

H: Hibernación
S: Sueño

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

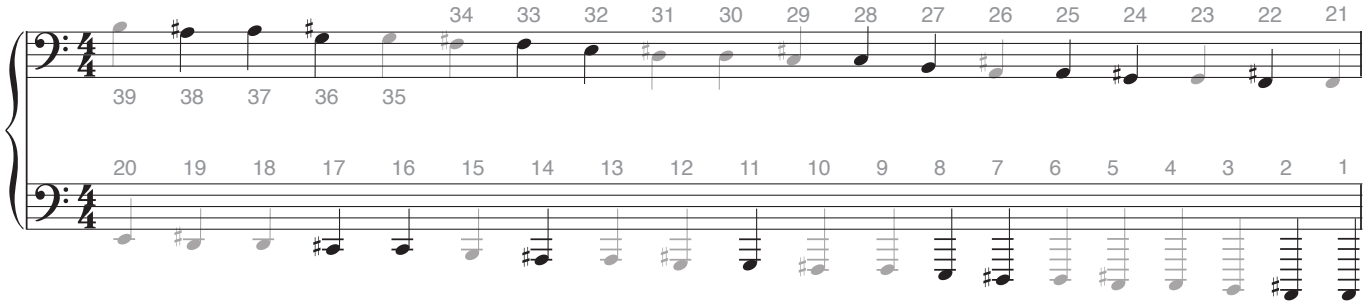
Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

Sincronía

Mapa de datos para movimiento no.3: 'Estado físico en hibernación y sueño ó Larghissimo / Tranquillo'

Estado rítmico cardiaco de hibernación y sueño de 33 especies animales (clave de Fa)

♩ - 60



39: Apteryx australis [Kiwi, si 4] l s/d
38: Phascolarctos cinereus [Koala, **la#4**] **l S: 1/8 1/16**
37: Octopus vulgaris [Pulpo, **la 4**] **l S: 6/4**
36: Vulpini [Zorro, **sol#4**] **l S: 1/8 1/16**
35: Pan troglodytes [Chimpance, sol 4] l s/d
34: Canis latrans [Coyote, fa#4] l s/d
33: Canis lupus familiaris [Perro, **fa 4**] **l S: 1/4**
32: Canis lupus [Lobo, **mi 4**] **l S: 1/4 1/32**
31: Ovis orientalis aries [Oveja, re#4] l s/d
30: Capra aegagrus hircus [Cabra, re 4] l s/d
29: Spheniscidae [Pingüino, do#4] l s/d
28: Homo sapiens [Humano, **do 4**] **l S: 1/4**
27: Sus scrofa domestica [Cerdo, **si 3**] **l S: 1/4**
26: Equus africanus-ferus [Mula, la#3] l s/d
25: Lacertilia [Lagarto, **la 3**] **l H: 60/4**
24: Cervus elaphus [Venado, **sol#3**] **l S: 1/8 1/16 1/32**
23: Antilope cervicapra [Antílope, sol 3] l s/d
22: Macropus giganteus [Cangüro, **fa#3**] **l S: 1/4 1/8**
21: Panthera leo [León, fa 3] l s/d
20: Panthera tigris [Tigre, mi 3] l s/d
19: Rhea americana [Avestruz, re#3] l s/d
18: Lama glama [Llama, re 3] l s/d
17: Phoca vitulina [Foca, **do#3**] **l S: 1/4 1/32**
16: Equus ferus caballus [Caballo, **do 3**] **l S: 2/4**
15: Camelus bactrianus [Camello, si 2] l s/d
14: Odobenus rosmarus [Morsa, **la#2**] **l S: 1/4 1/8**
13: Gorilla [Gorila, la 2] l s/d
12: Tursiops truncatus [Delfín, sol#2] l s/d
11: Bos primigenius taurus [Vaca, **sol 2**] **l S: 1/4 1/8**
10: Bos primigenius taurus [Toro, fa#2] l s/d
9: Bos primigenius taurus [Buey, fa 2] l s/d
8: Ursus arctos arctos [Oso, **mi 2**] **l H: 7/4 1/8, S: 1/4 1/8**
7: Otaria flavescens [Lobo Marino, **re#2**] **l S: 1/8 1/32**
6: Bos primigenius indicus [Cebuino, re 2] l s/d
5: Bison bison [Búfalo, do#2] l s/d
4: Selachimorph [Tiburón, do 2] l s/d
3: Giraffa camelopardalis [Girafa, si 1] l s/d
2: Loxodonta africana [Elefante, **la#1**] **l S: 1/4 1/8**
1: Balaena mysticetus [Ballena, **la 1**] **l S: 3/4**

H: Hibernación
S: Sueño

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

Sincronía

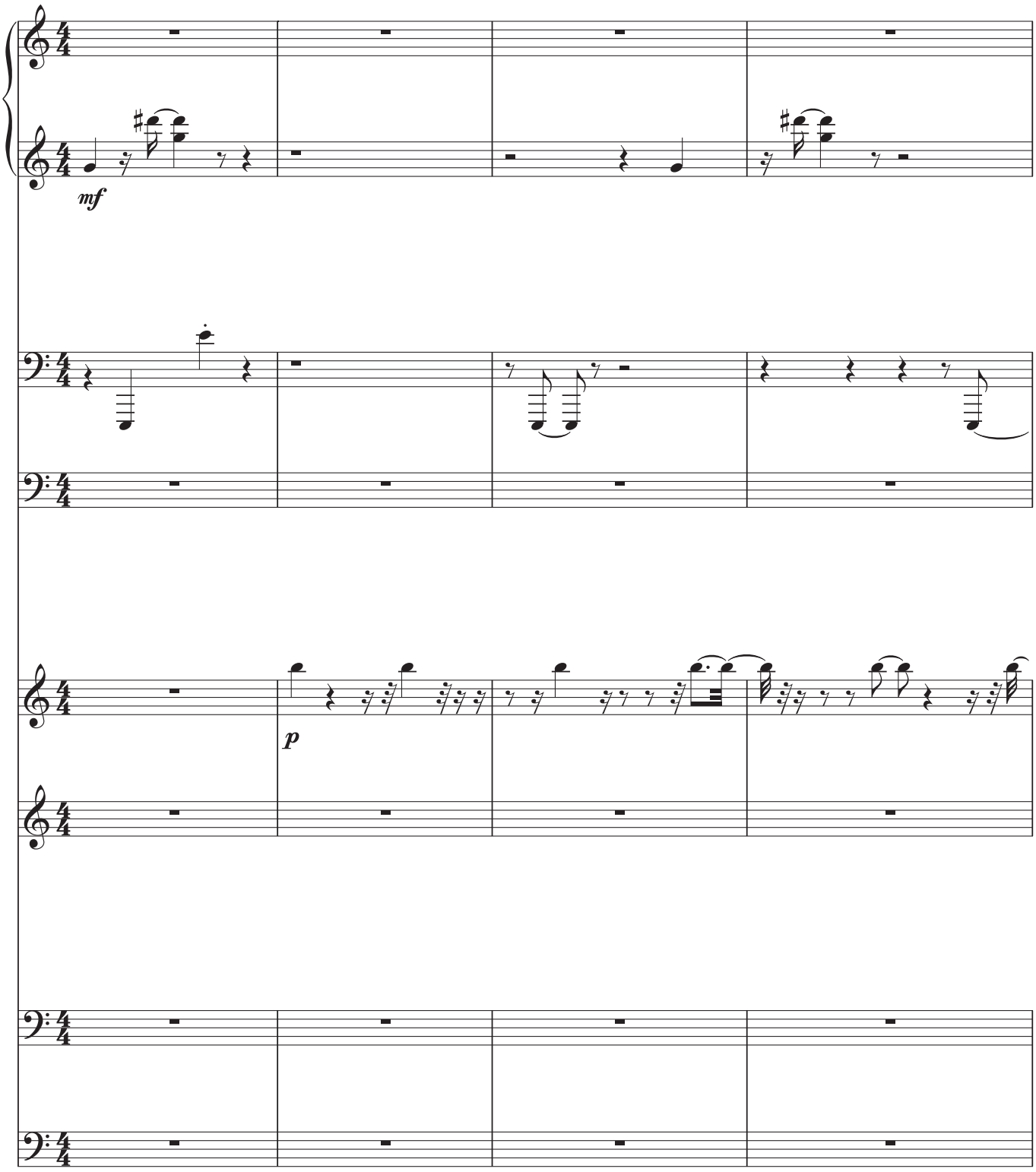
Movimiento no.3: 'Estado físico en hibernación y sueño ó Larghissimo / Tranquillo'

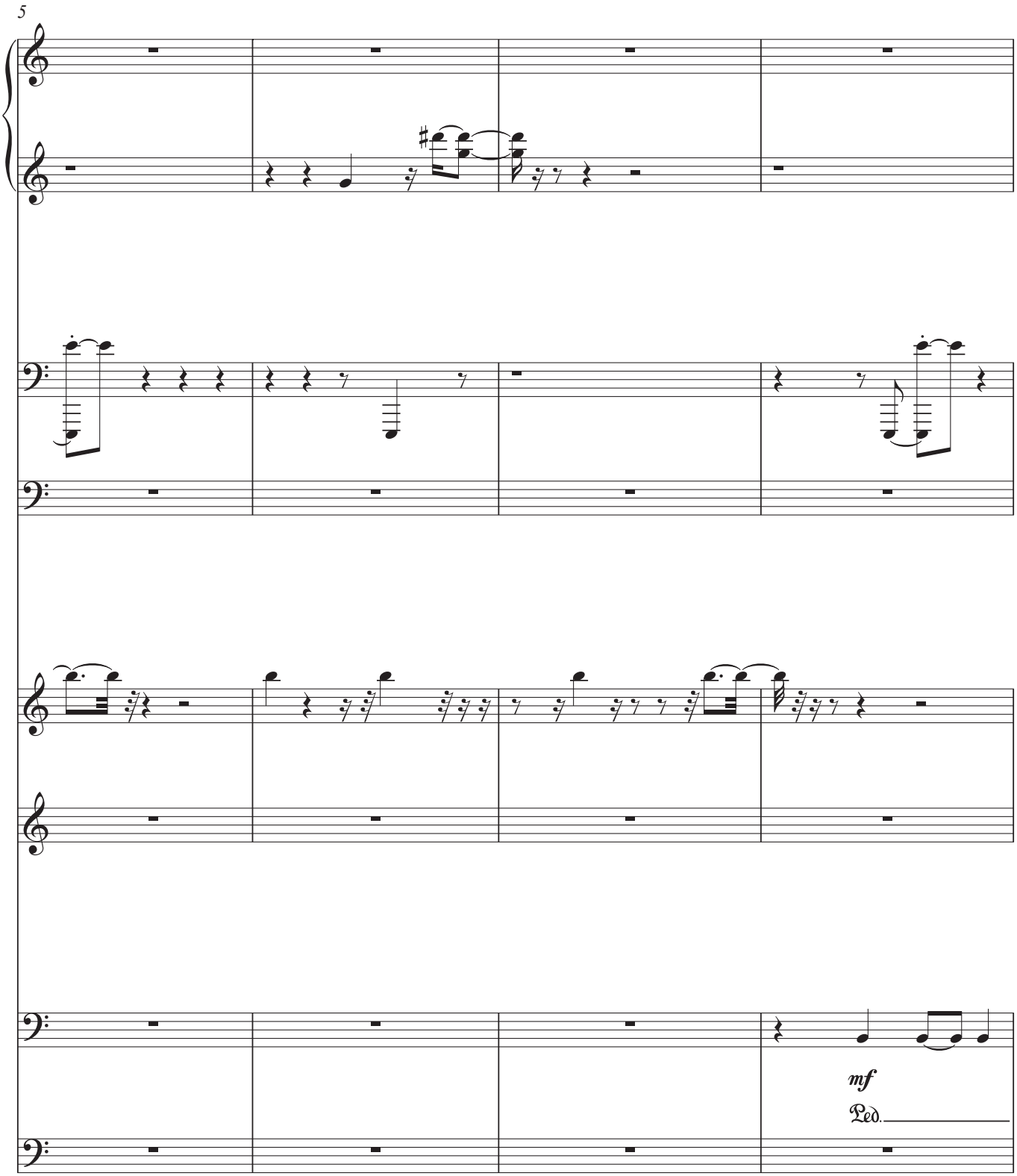
Estado rítmico cardiaco de hibernación y sueño de 33 especies animales (clave de Sol)

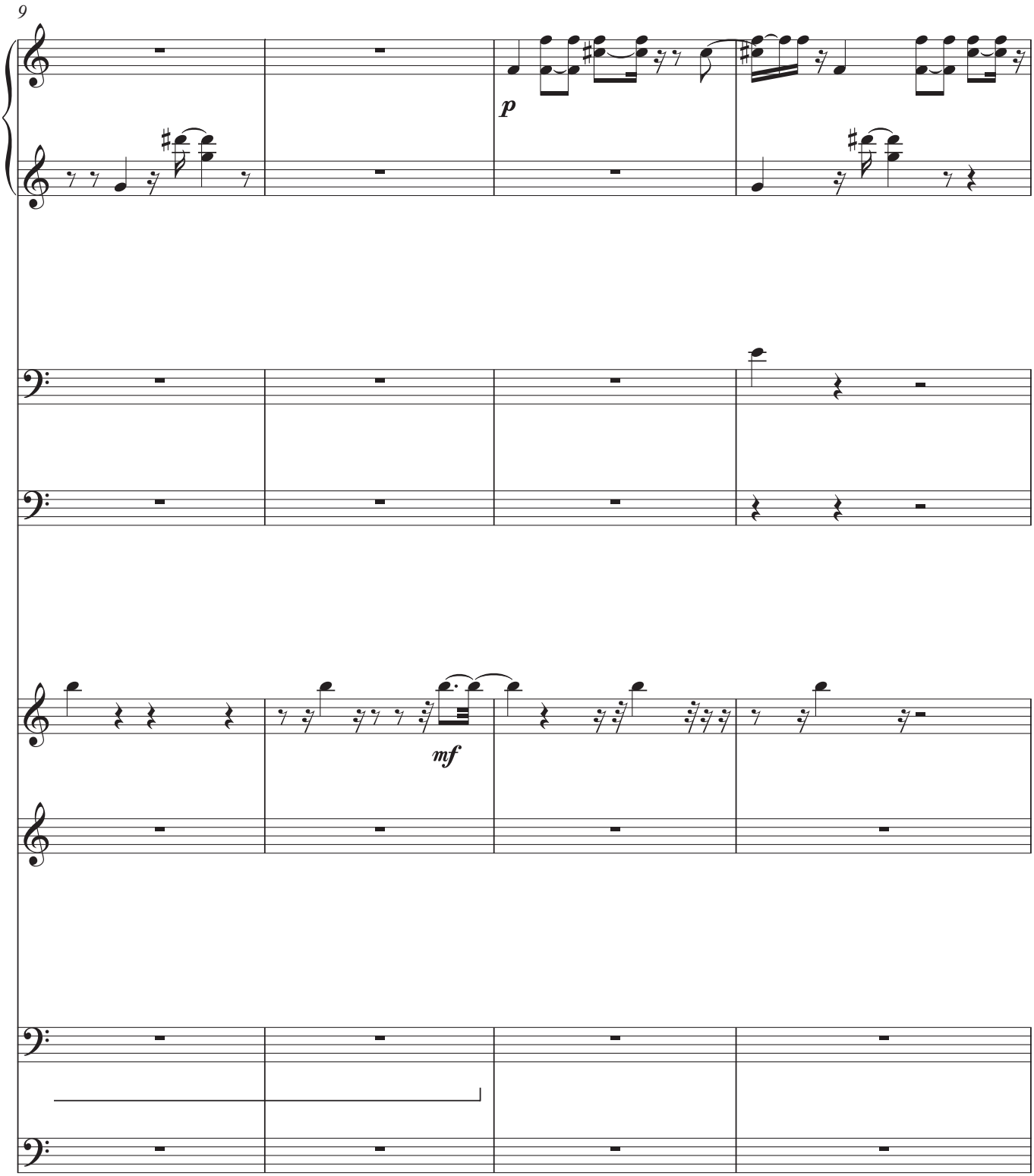
♩ - 60

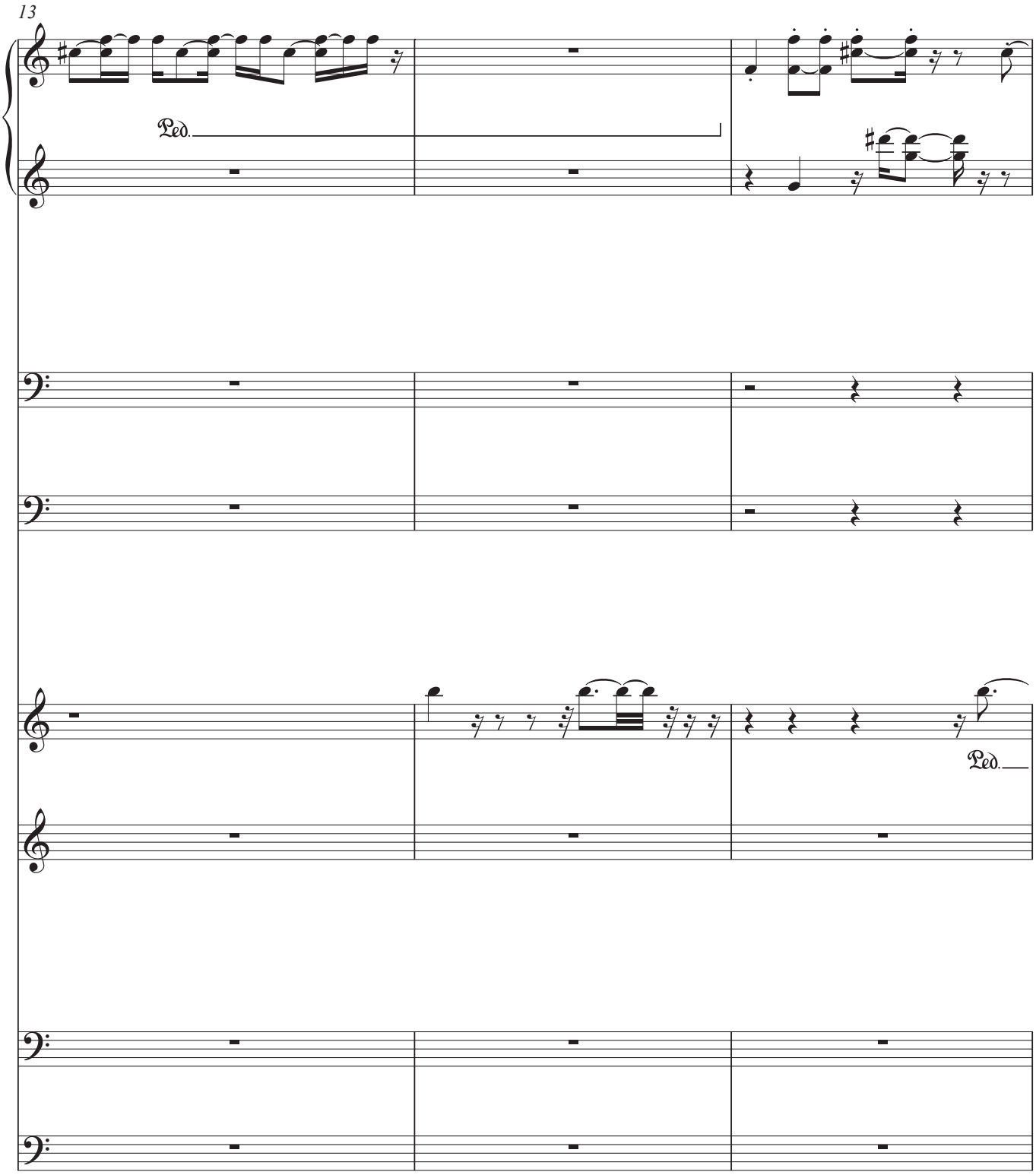
Lorena Mal
Emilio Hinojosa Carrión

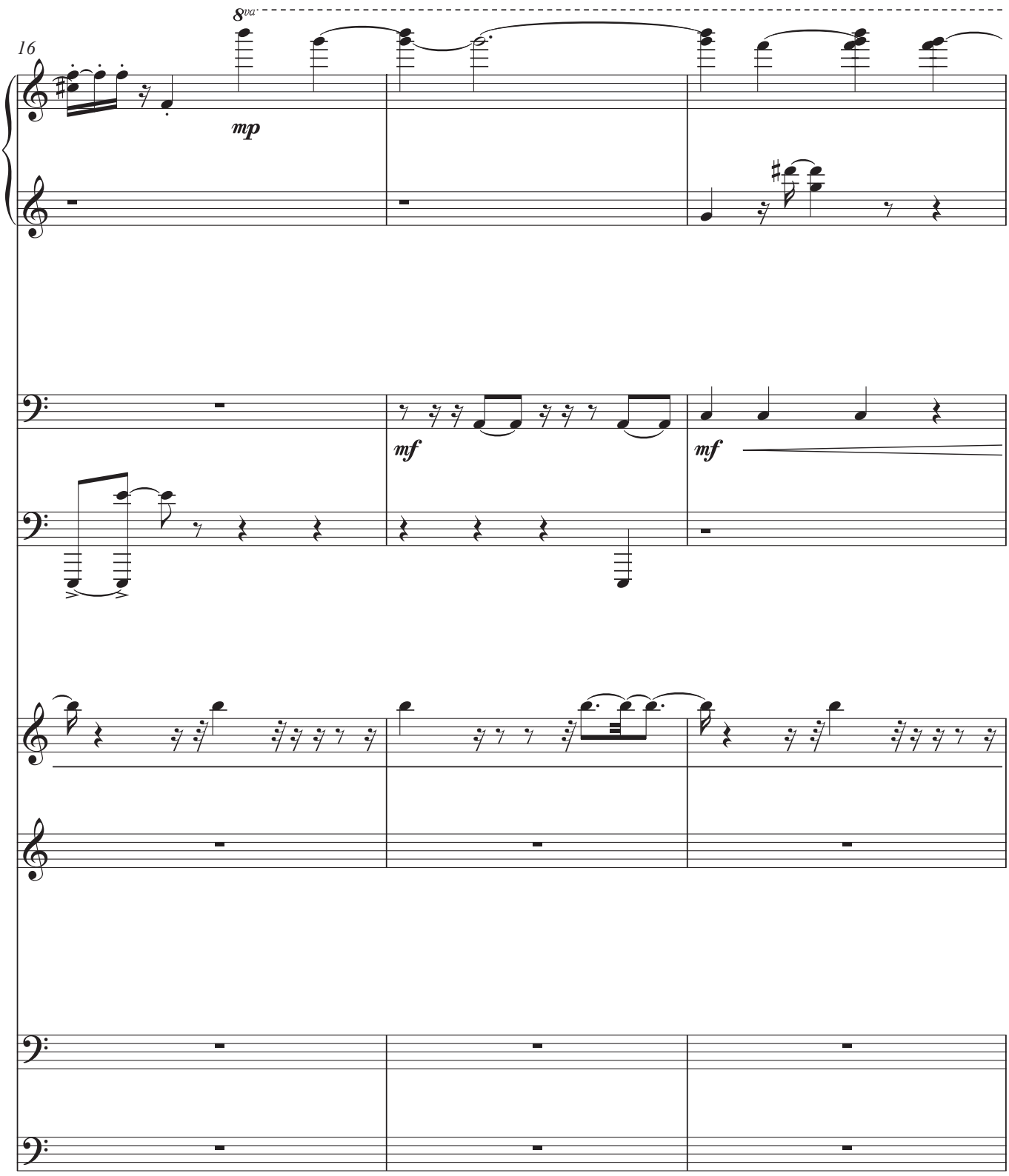
[2013-2014]

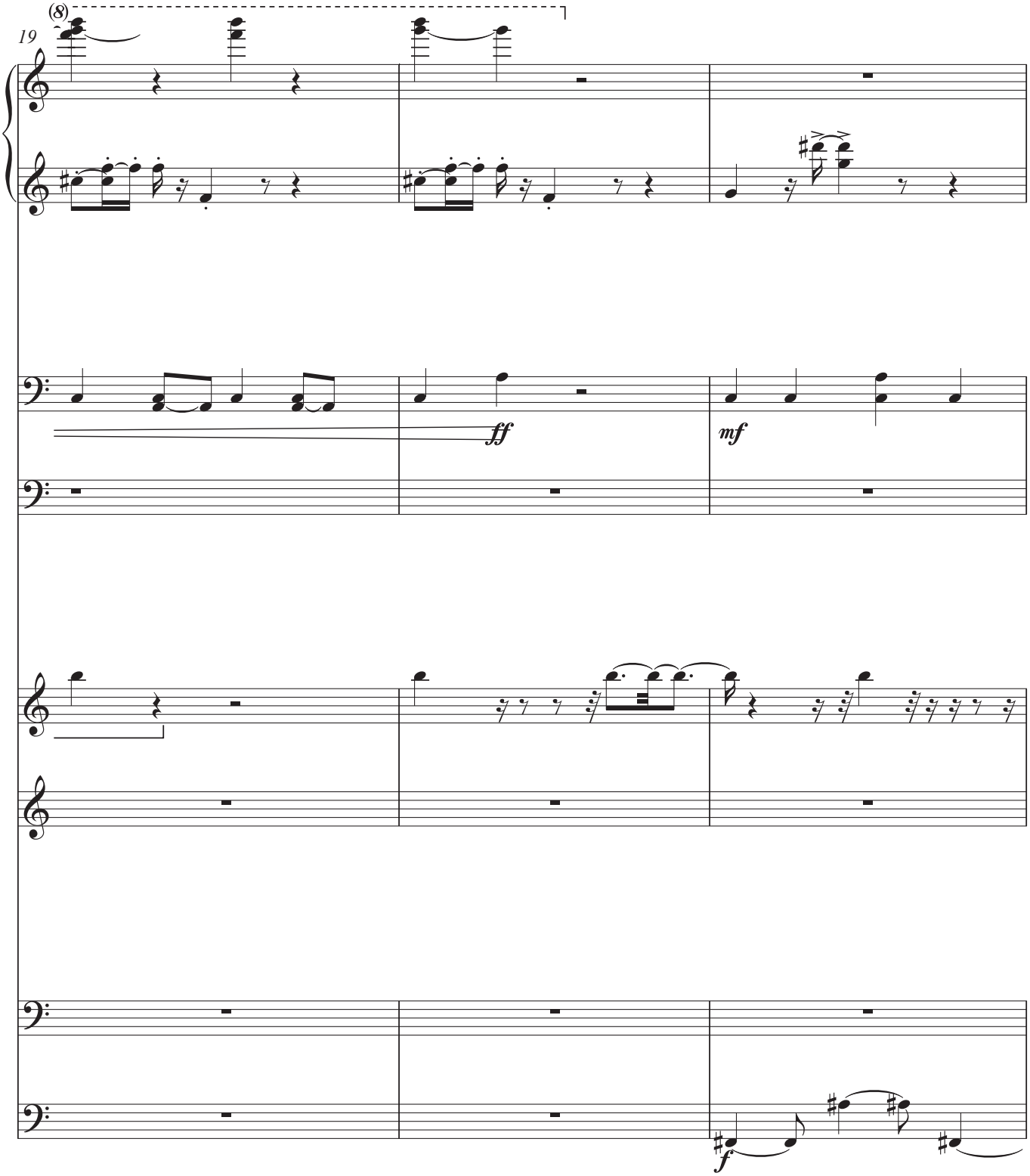


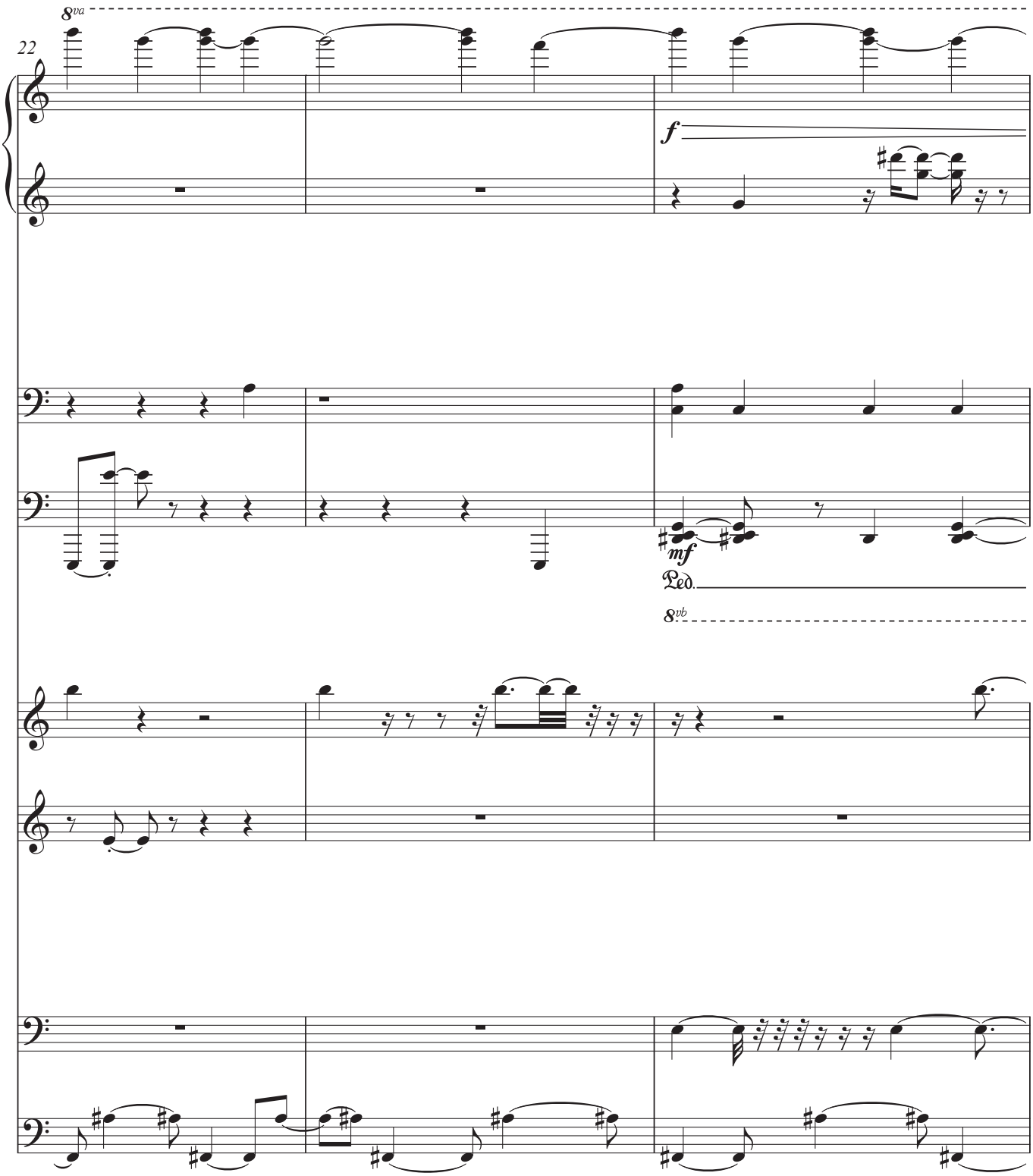

5
mf
Ped.

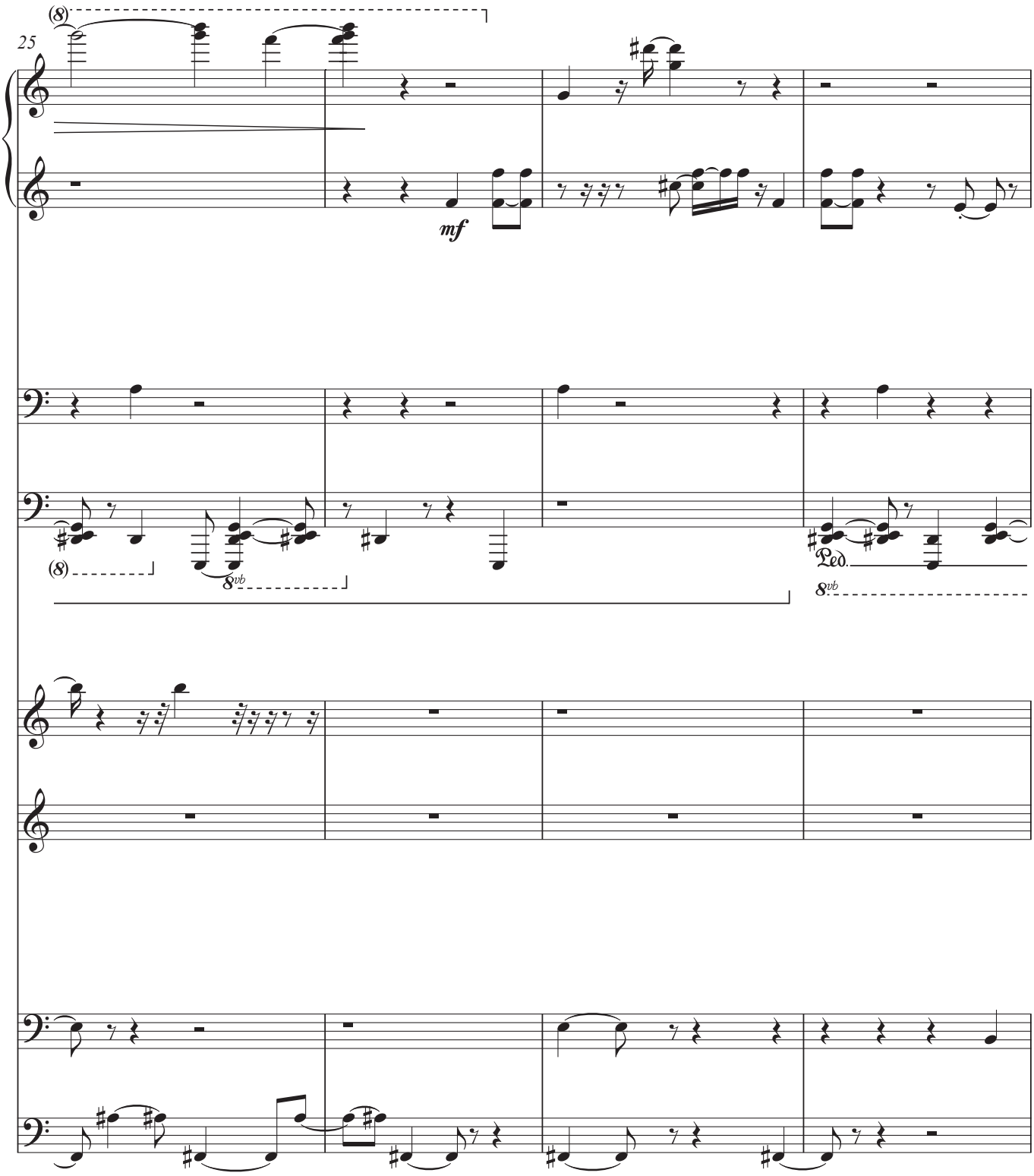

9
p
mf

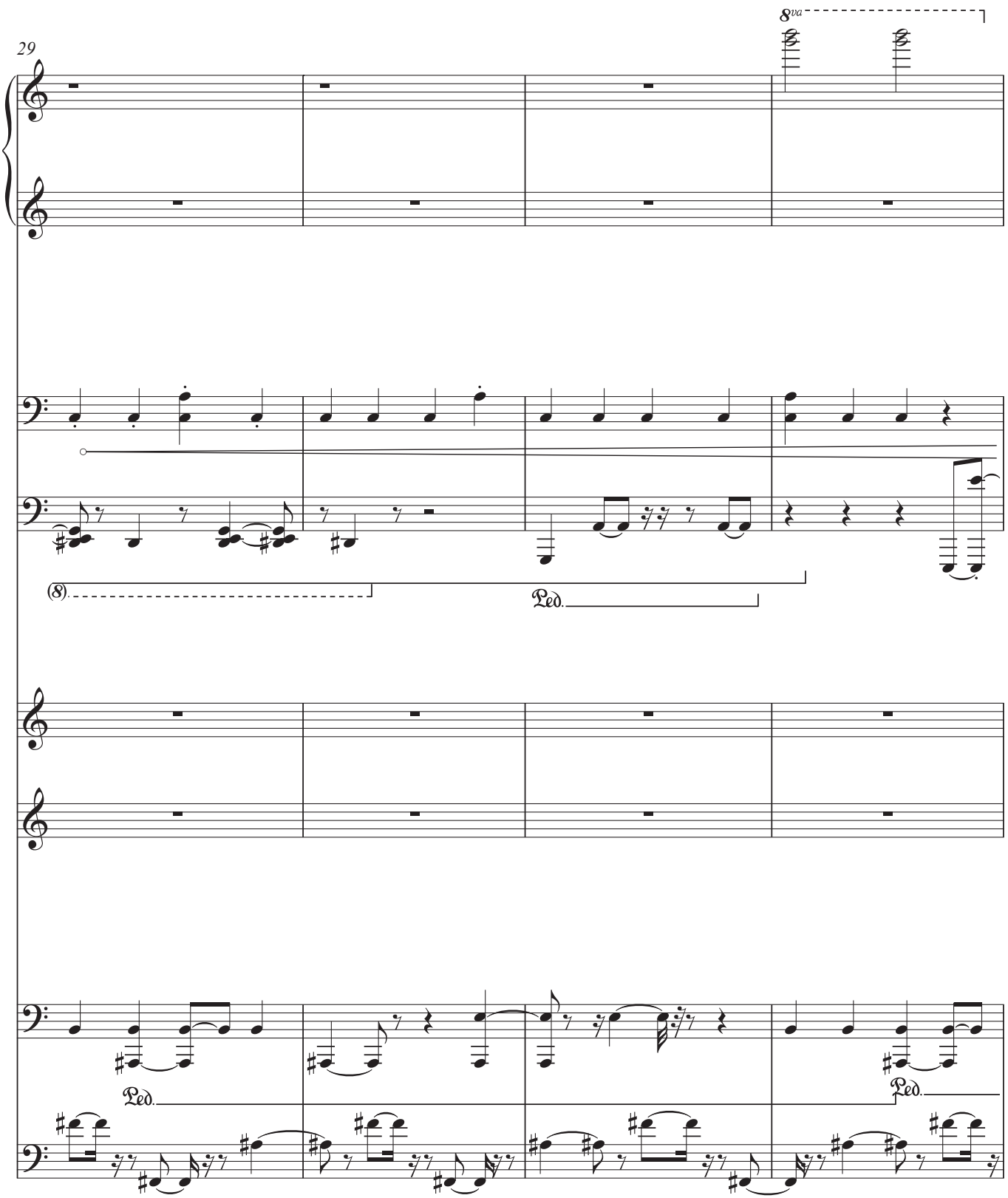

13
Ped.
Ped.

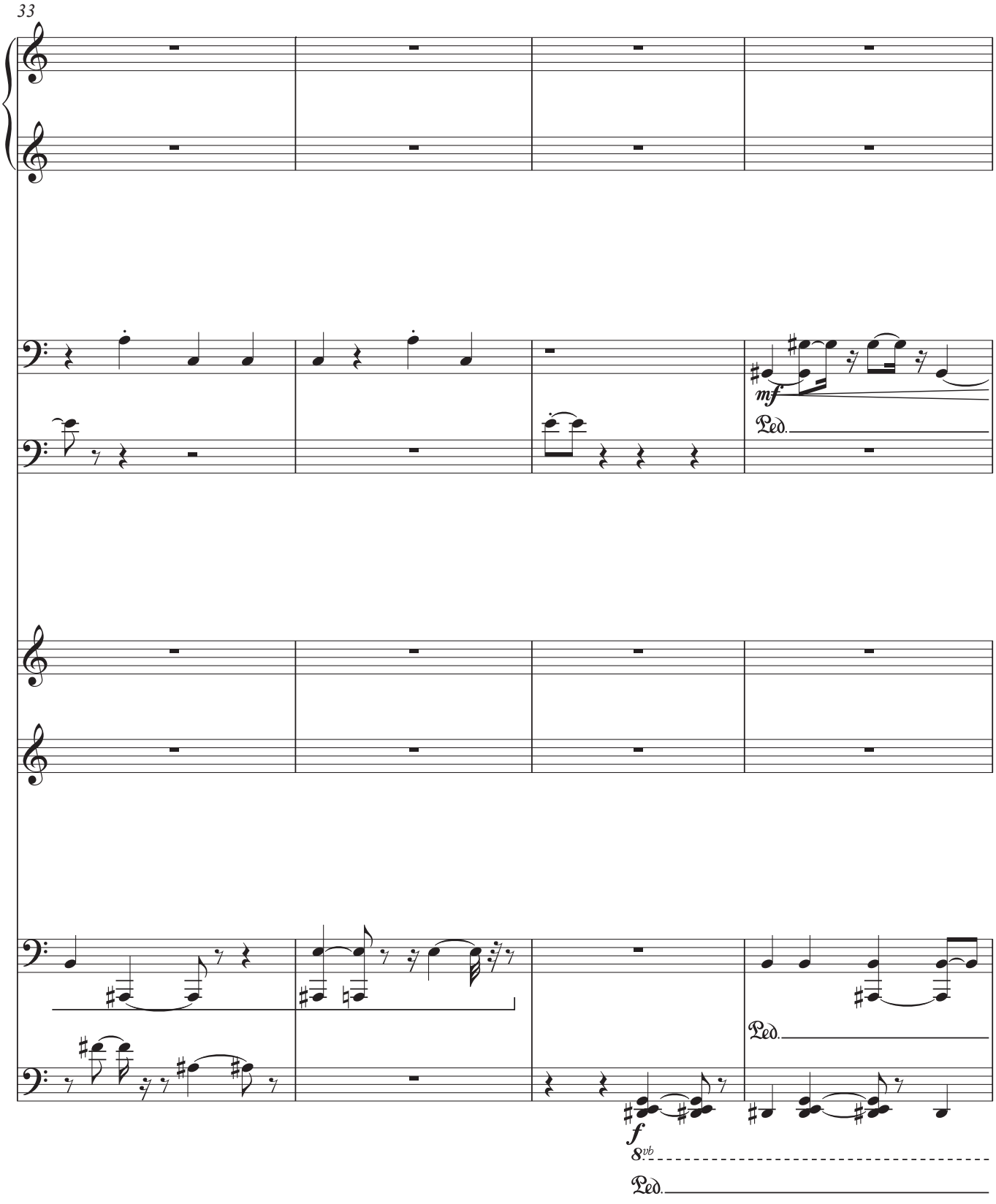

16
8va
mp
mf
mf

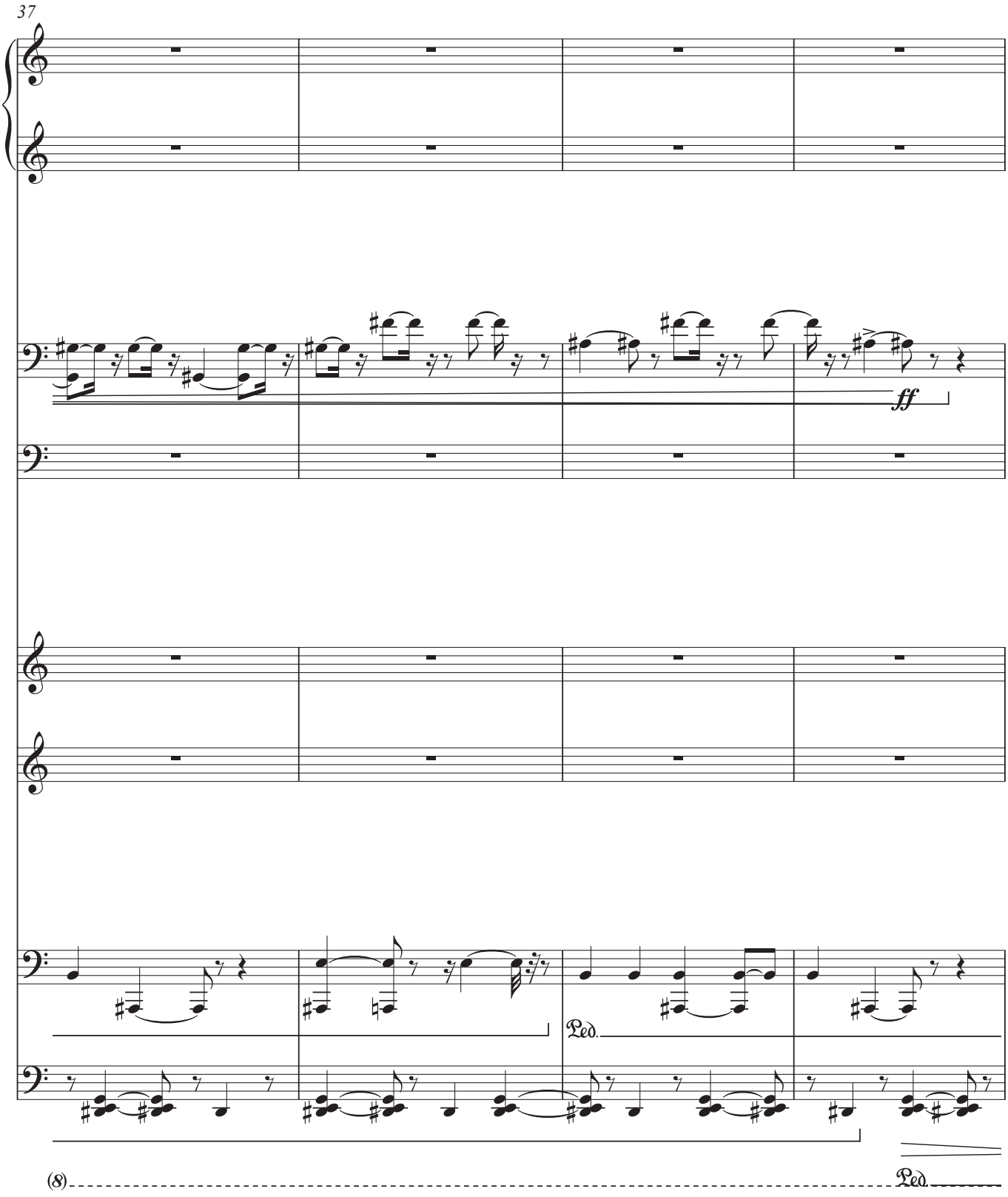

(8)
19
ff
mf
f

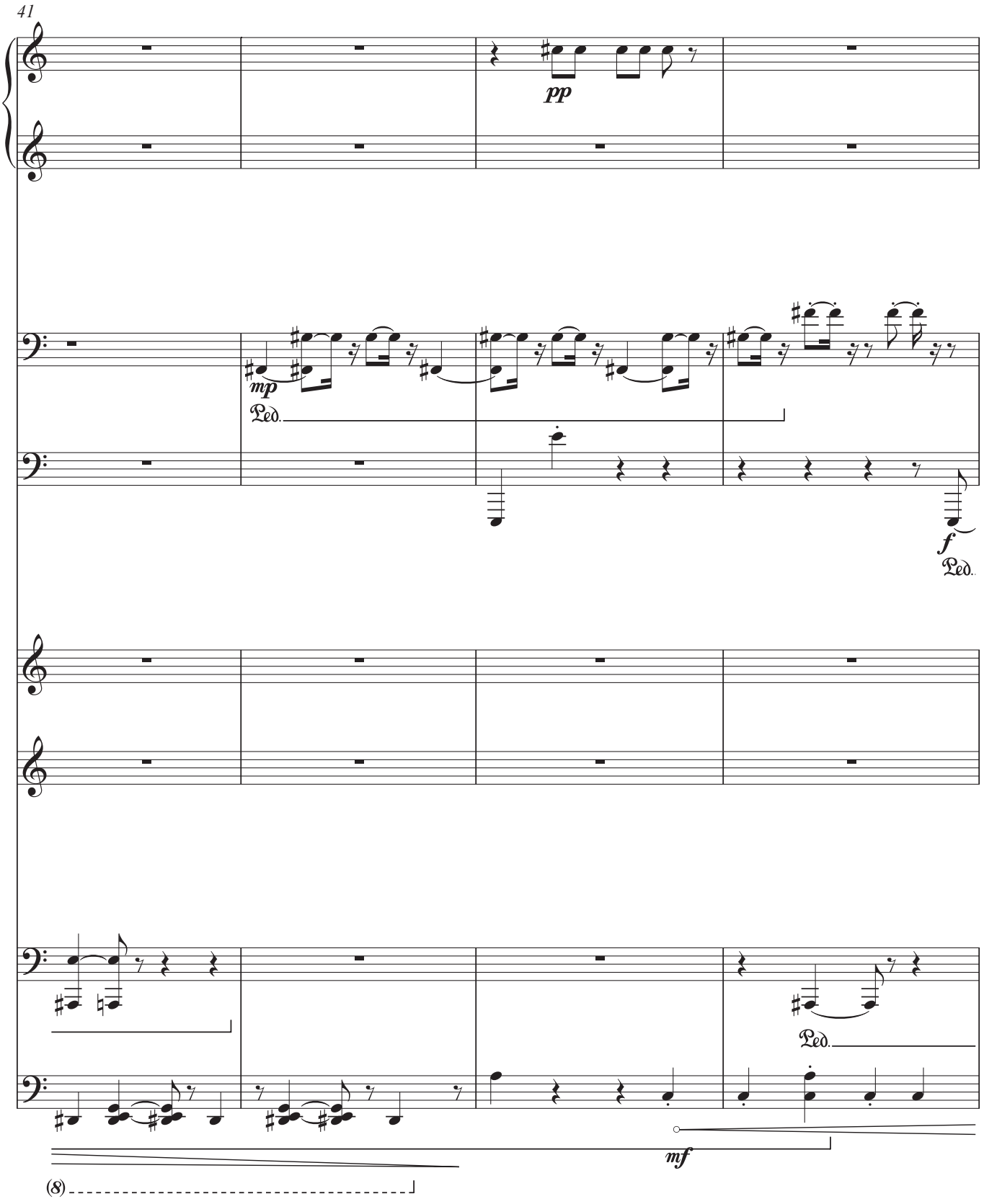

8va
22
f
mf
Ped.
8vb

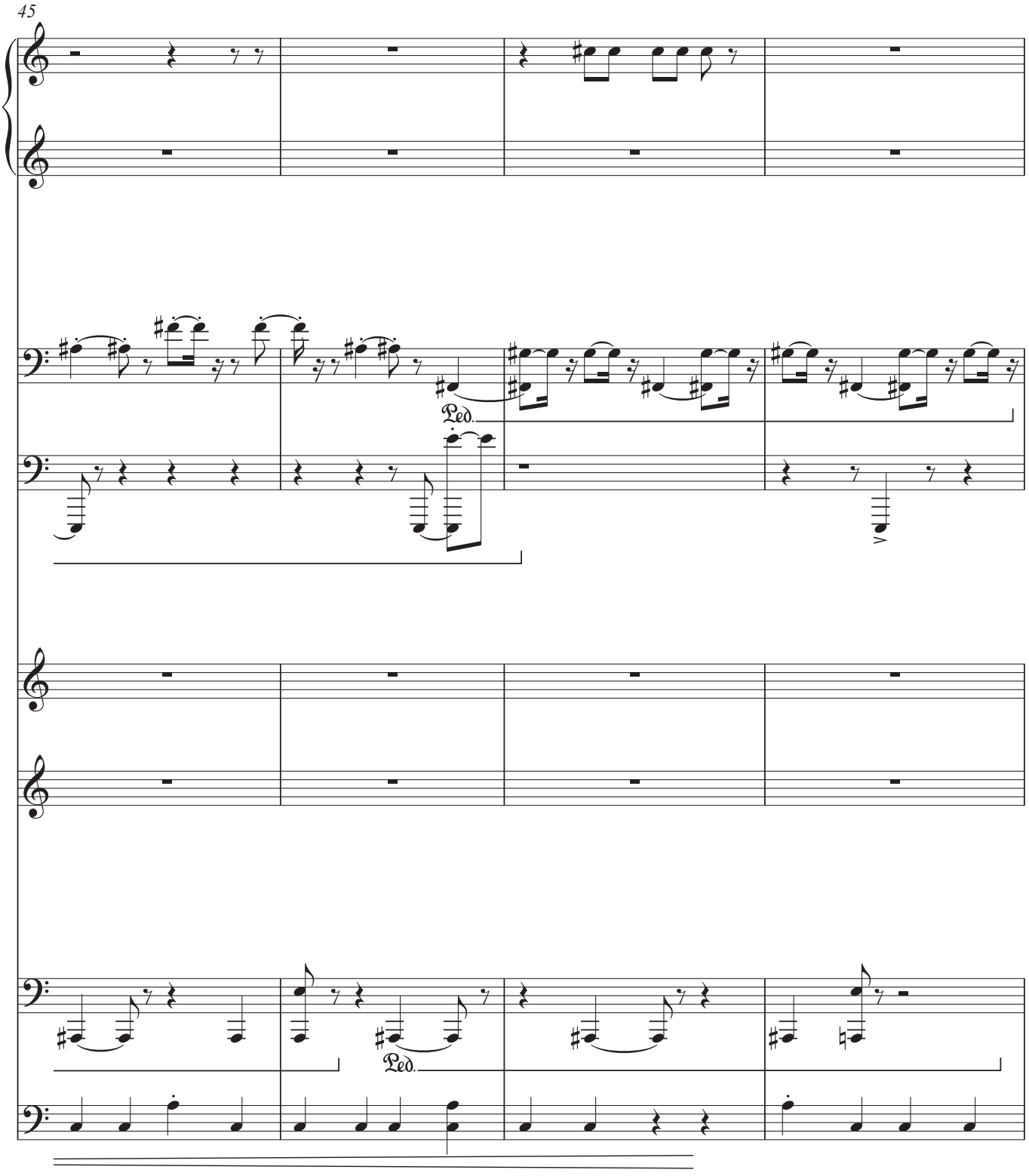

25
mf
Ped.

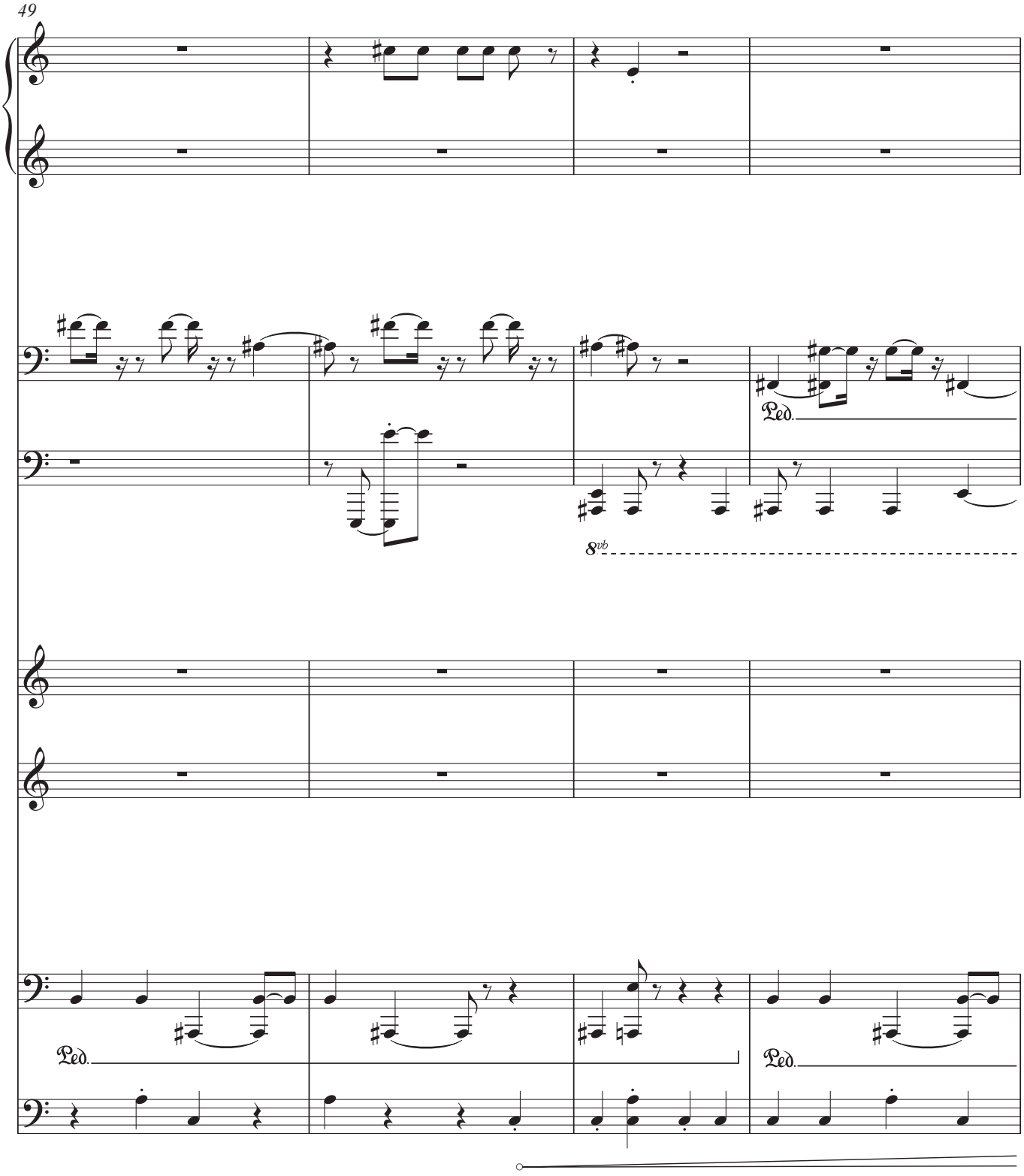

29
8va
(8)
Ped.
Ped.
Ped.

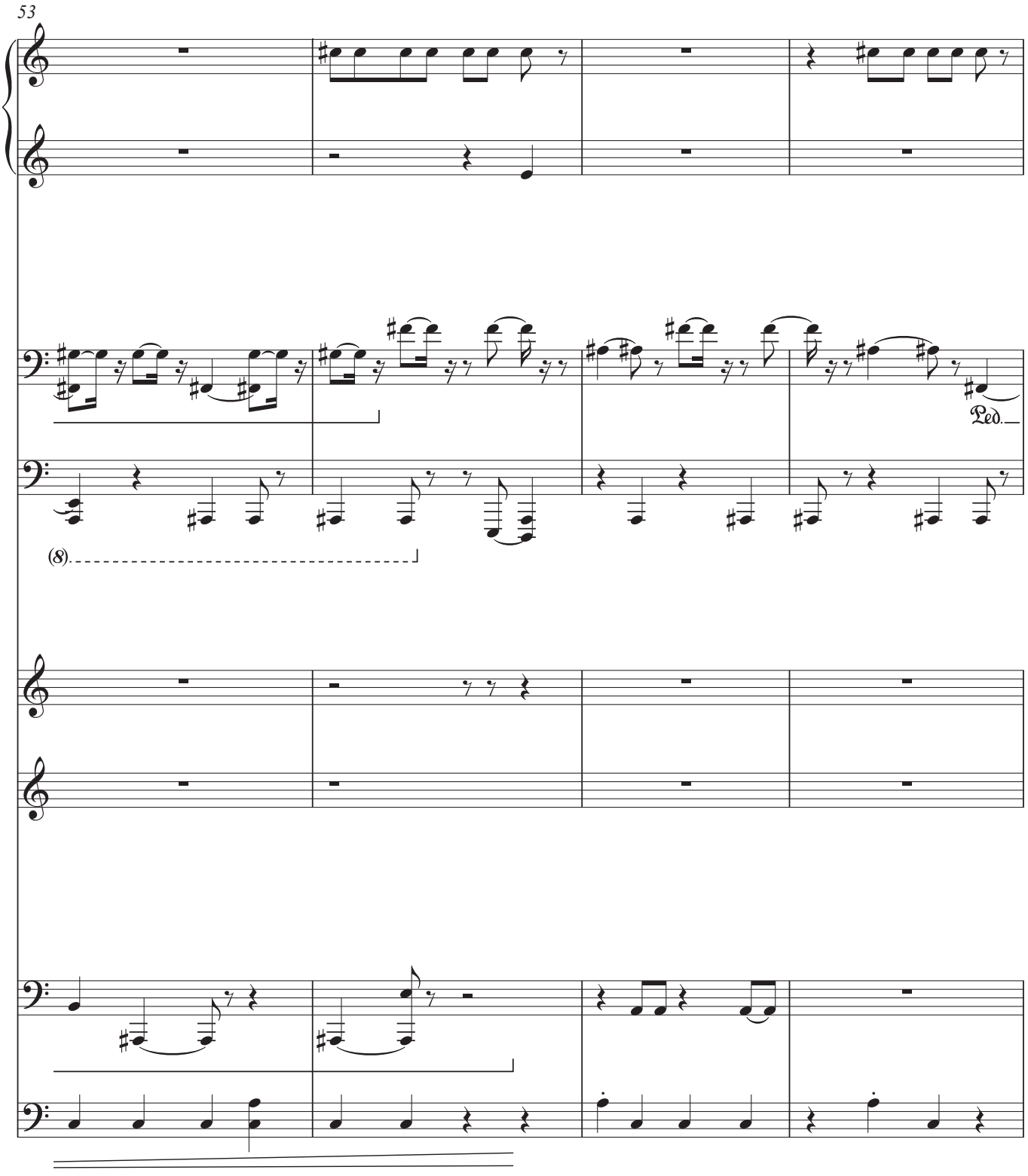

33
mf
Ped.
Ped.
f
8vb
Ped.

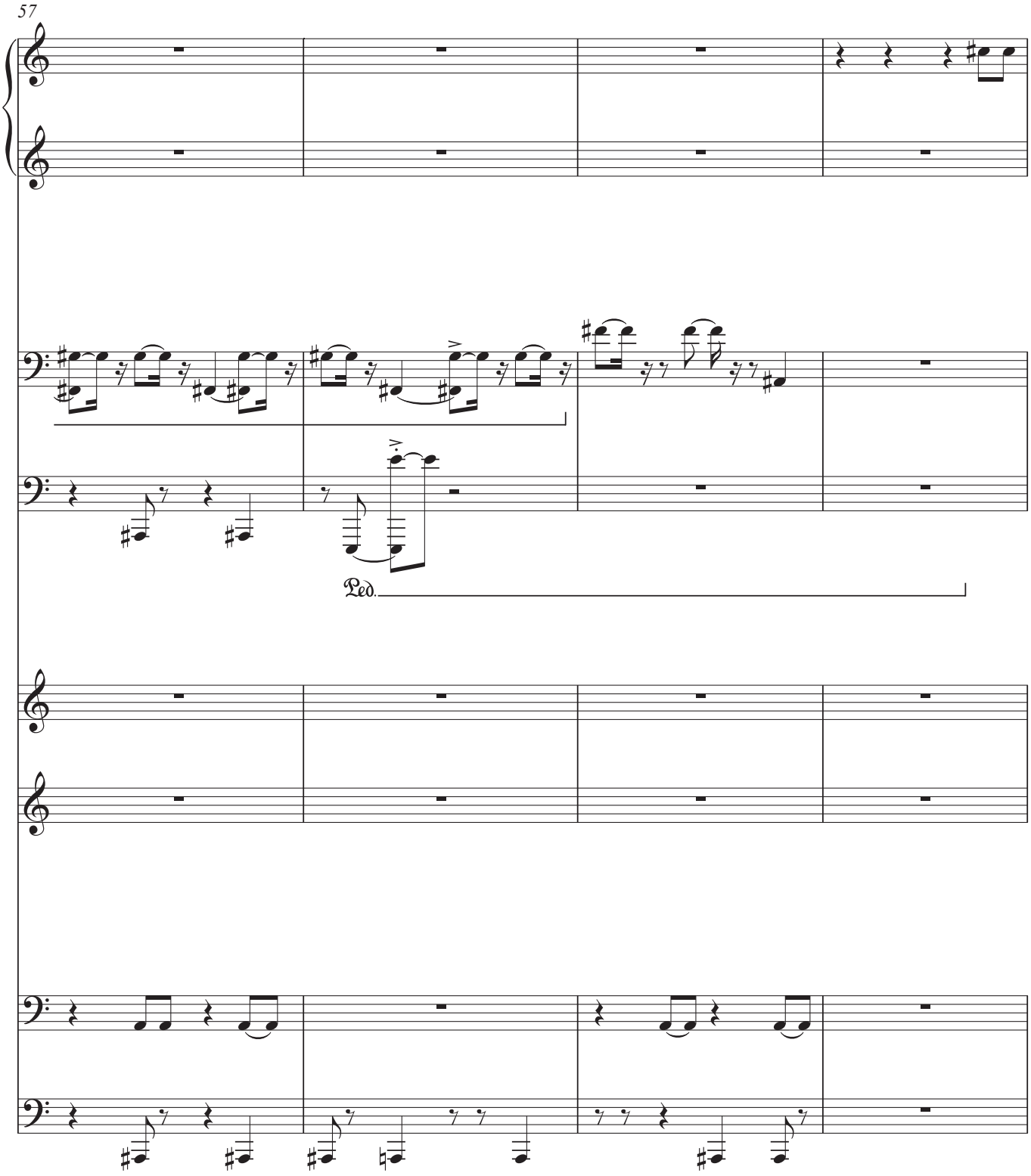

37
ff
Ped.
(8)
Ped.

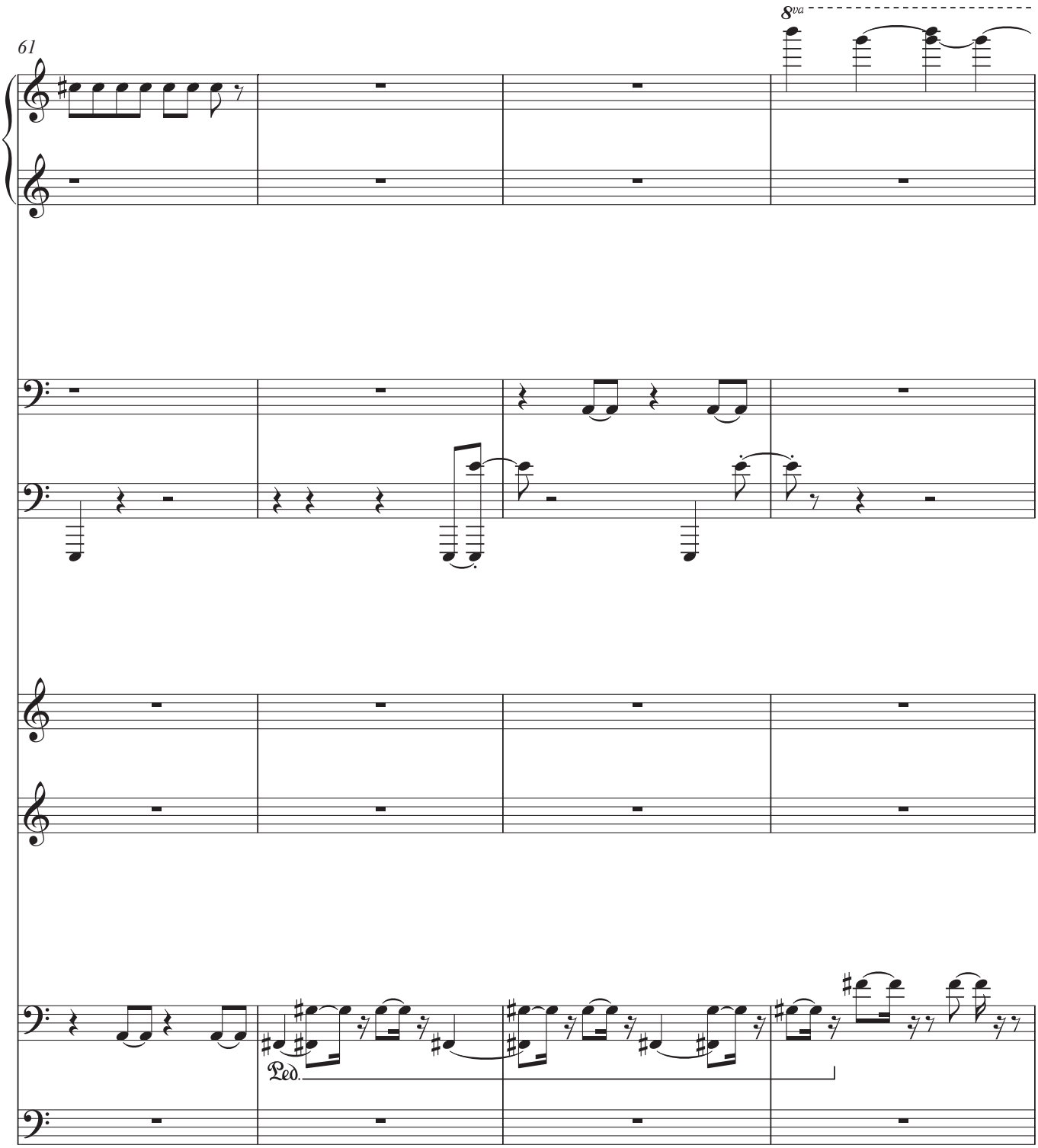

41
pp
mp
Ped.
f
Ped.
Ped.
mf
(8)

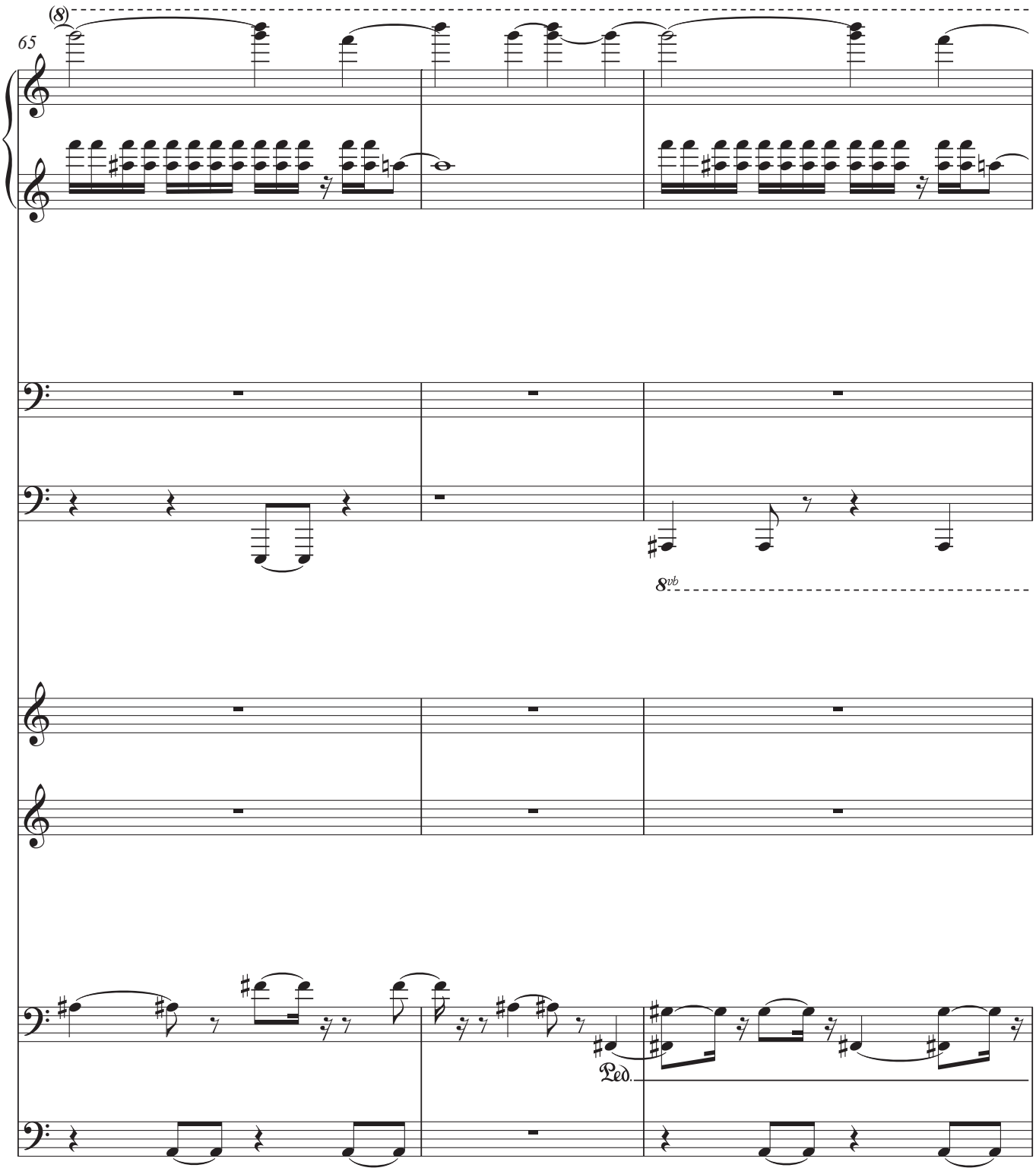

45
Ped.
Ped.

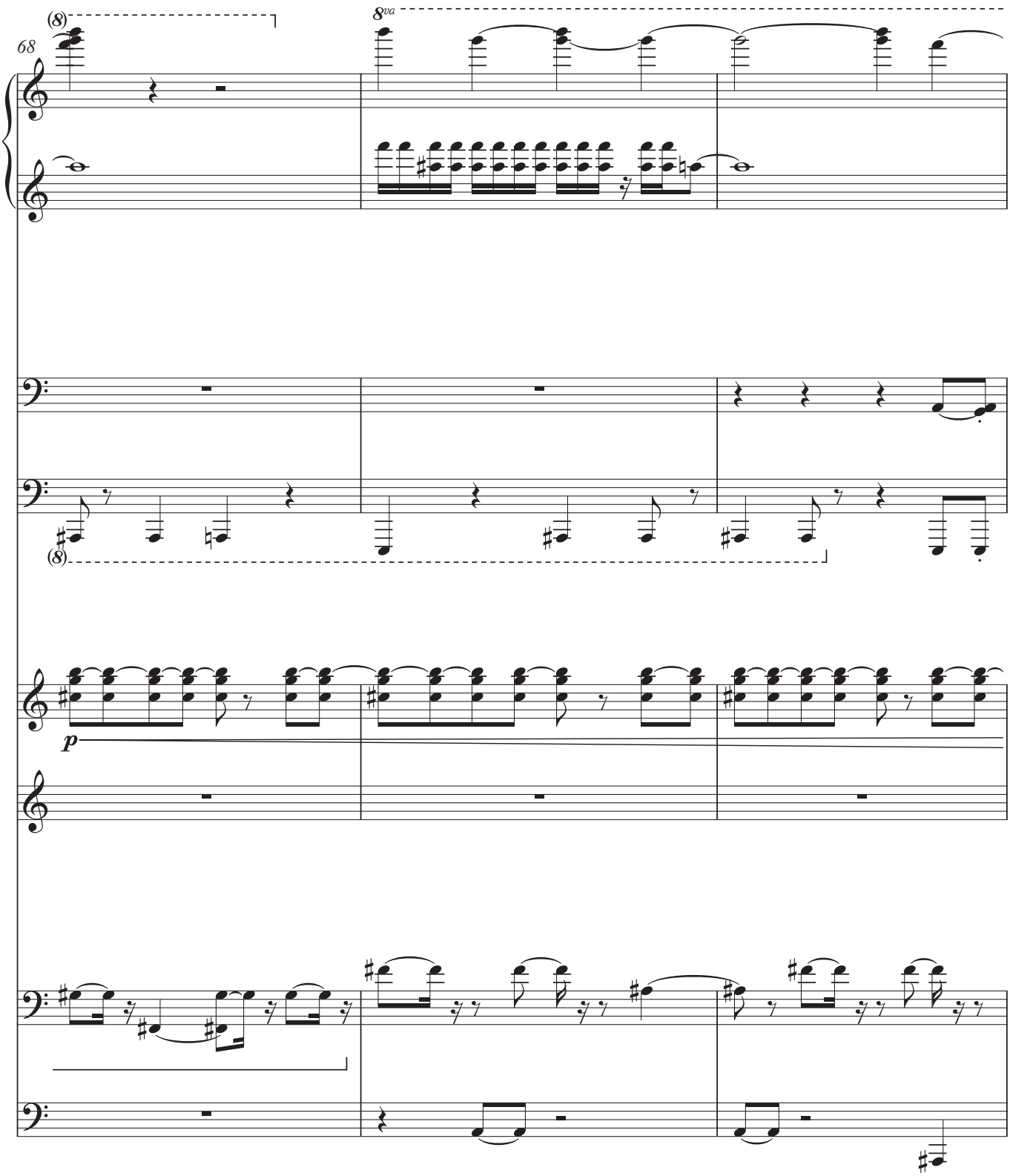

49
Ped.
8vb
Ped.
Ped.

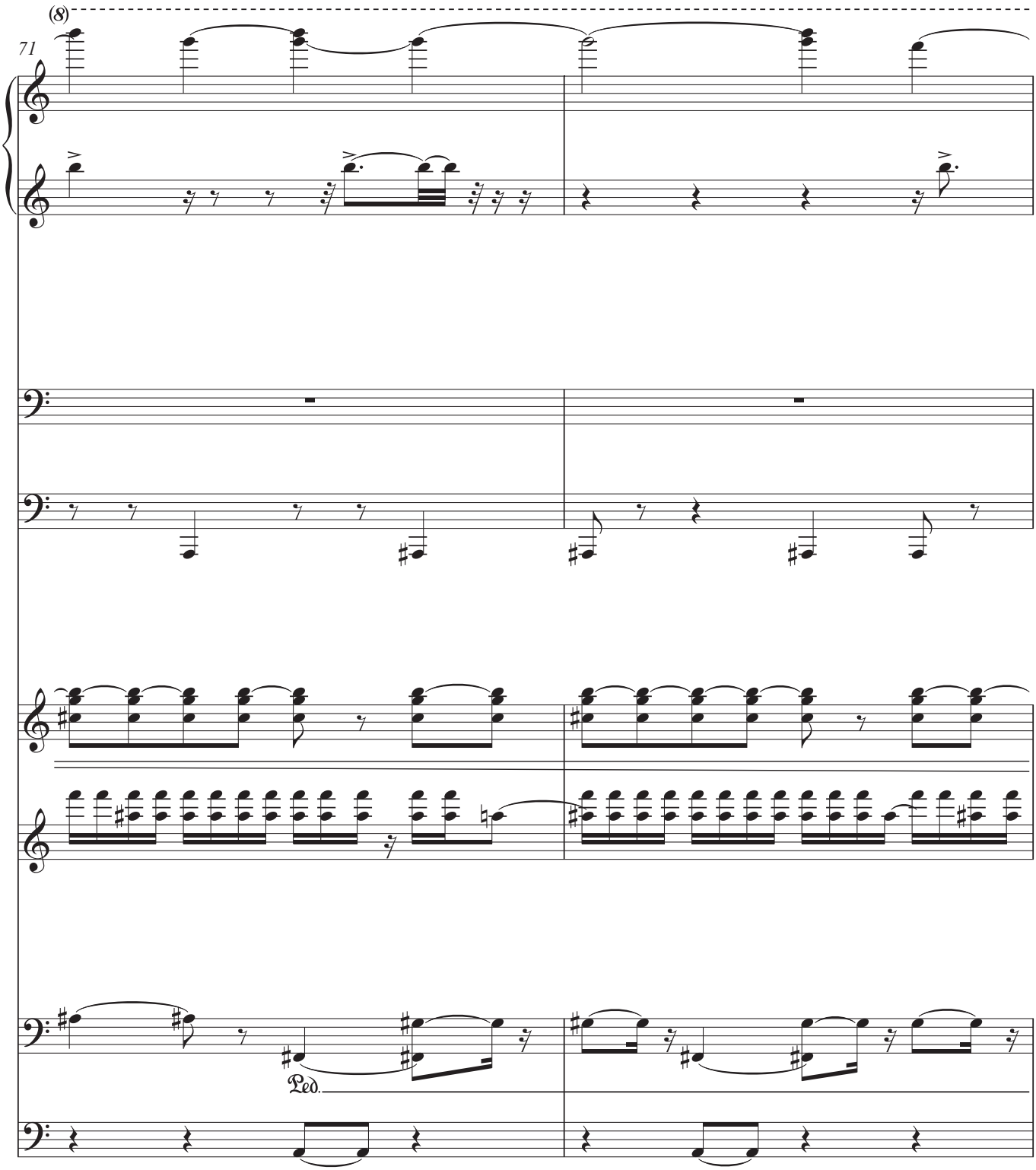

53
Ped.
(8)

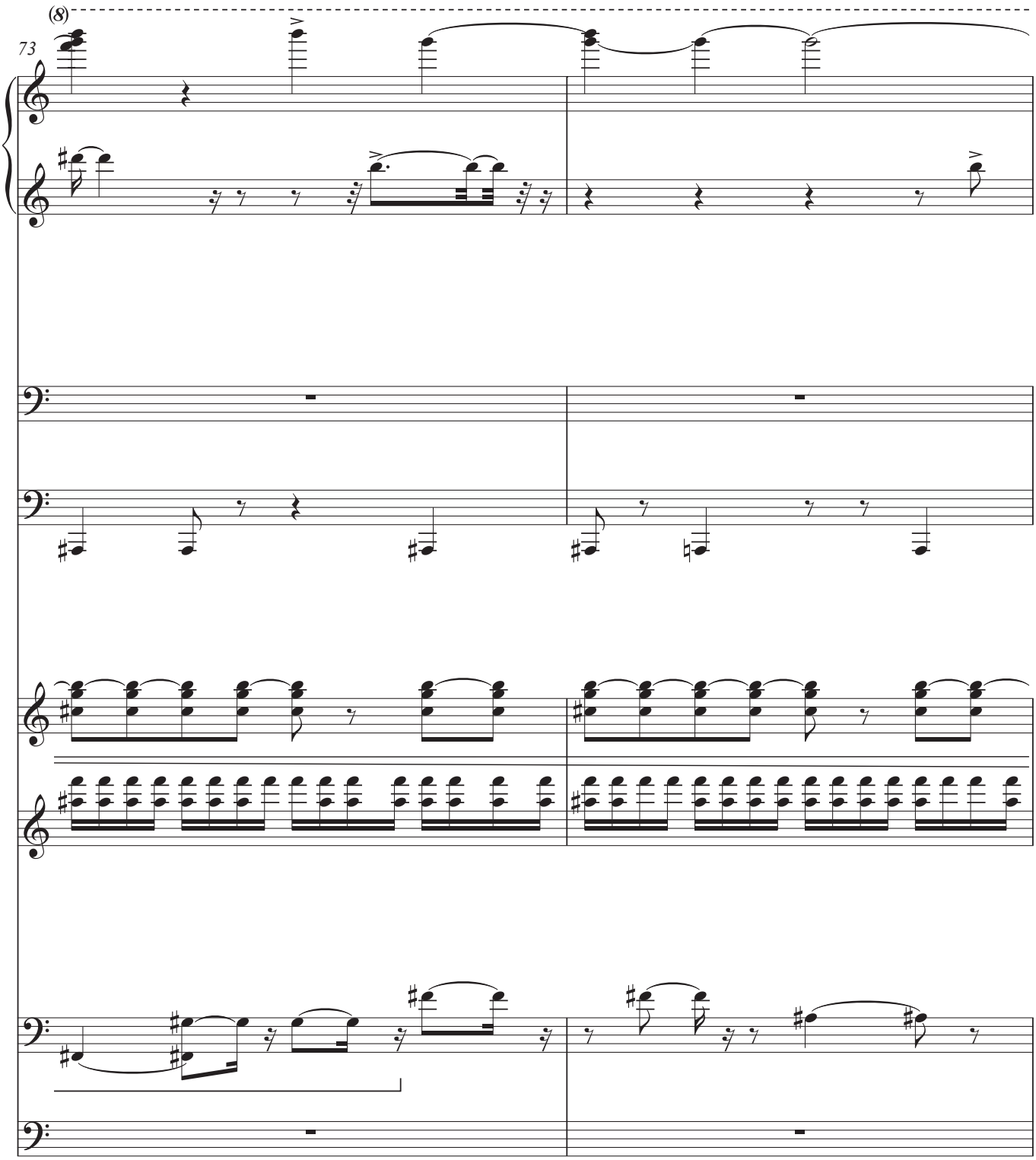

57
Ped.

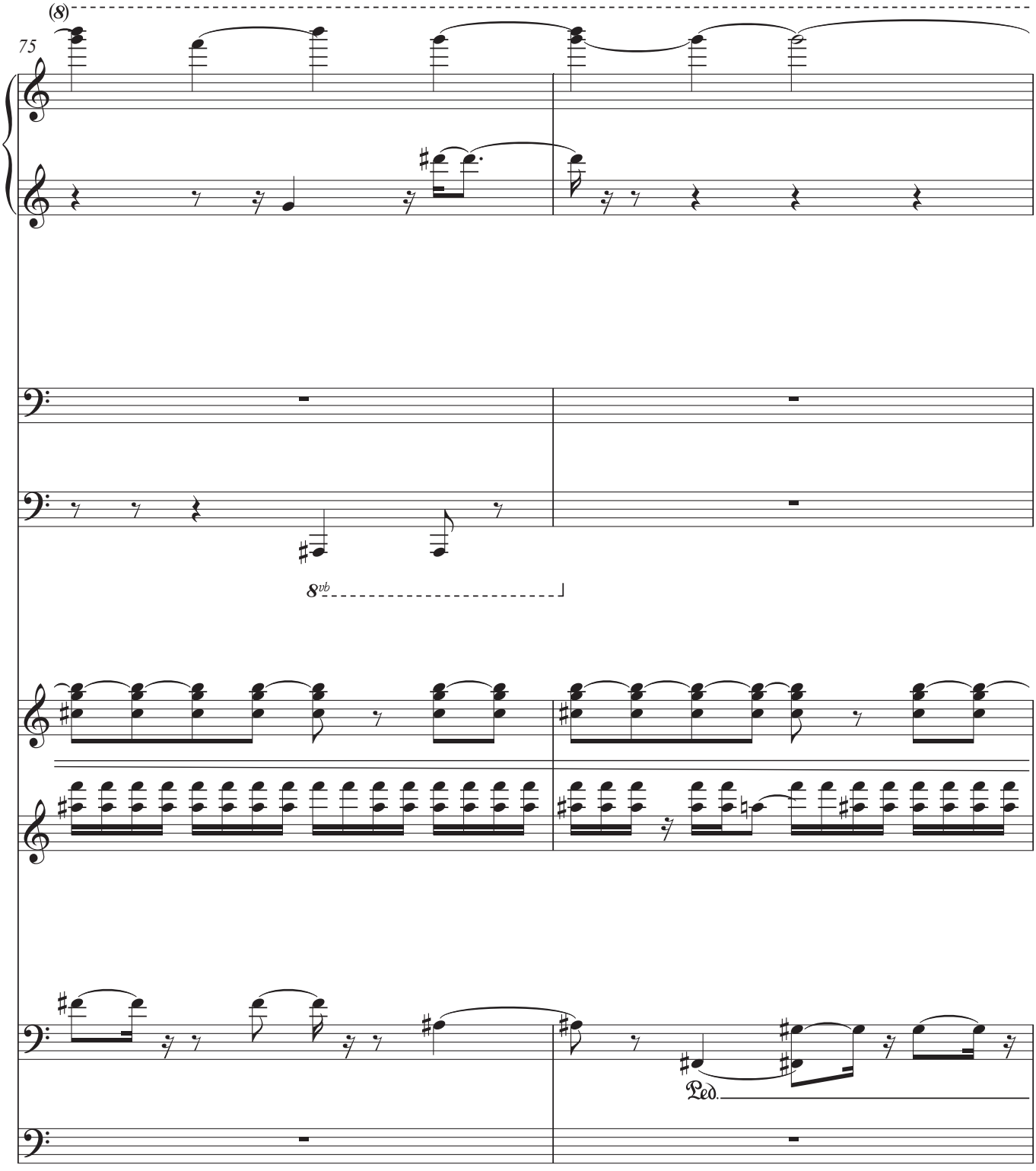

61
8va
Ped.

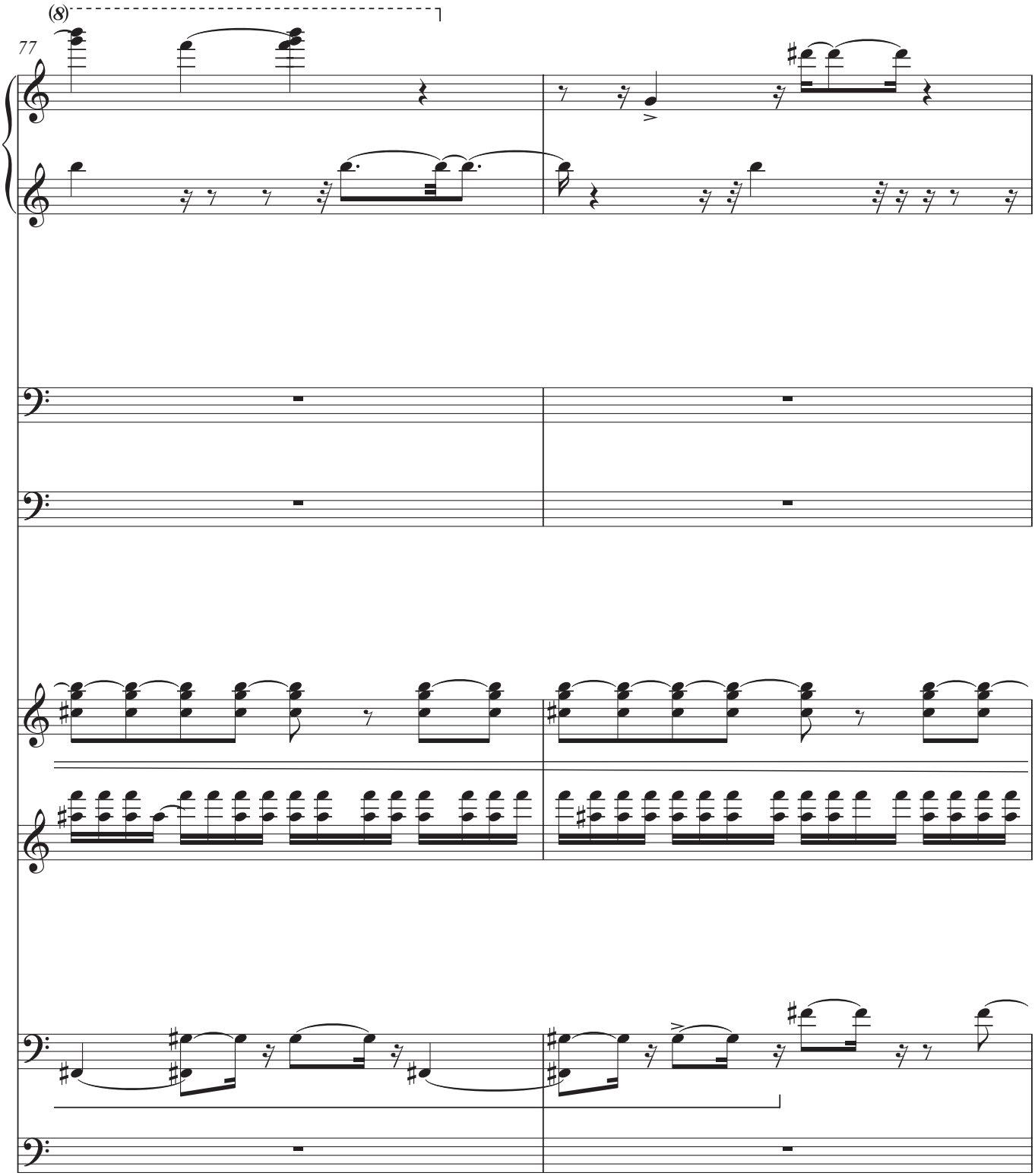

65
8
8vb
Ped.

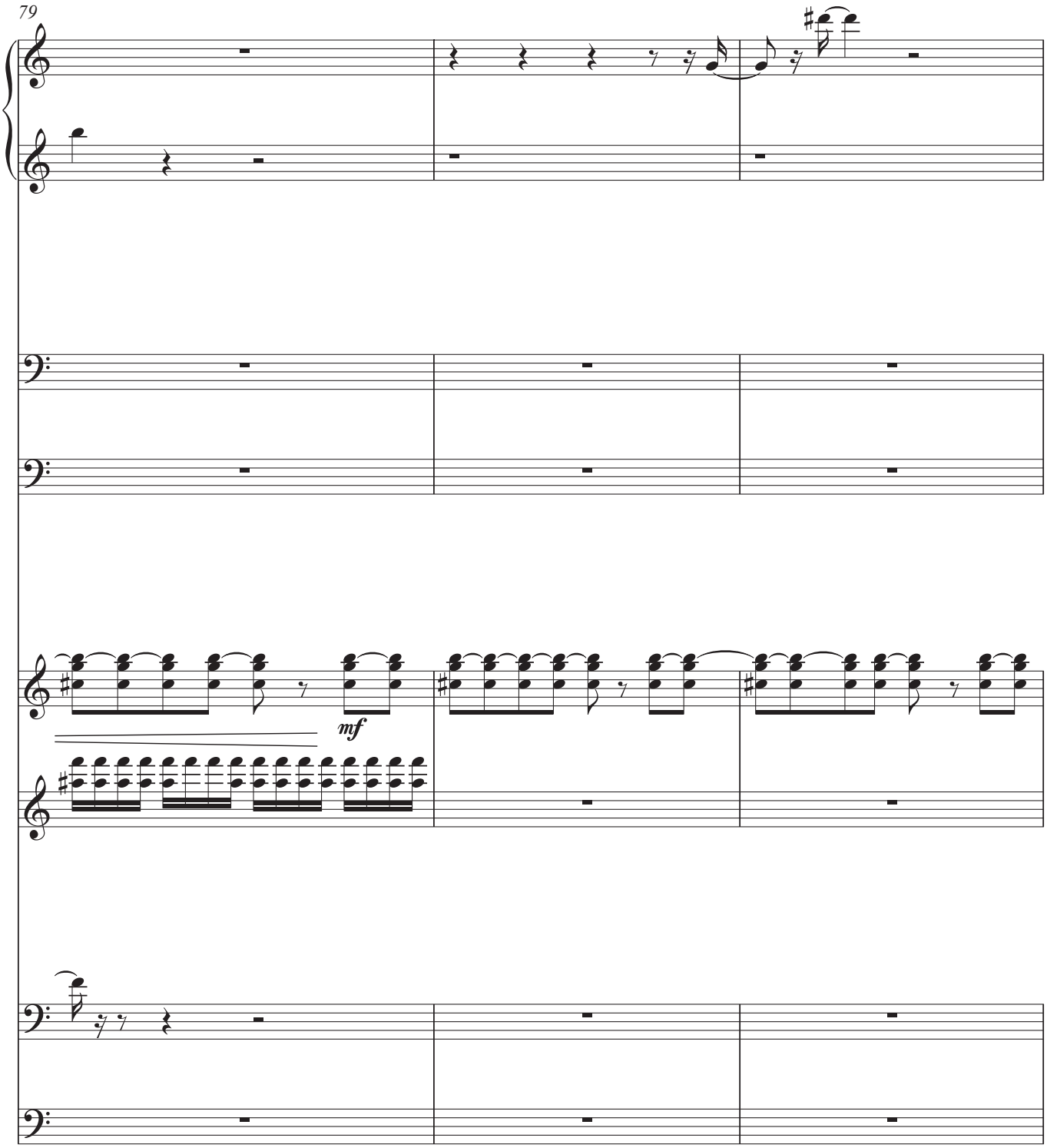

68
(8)
8va
(8)
p

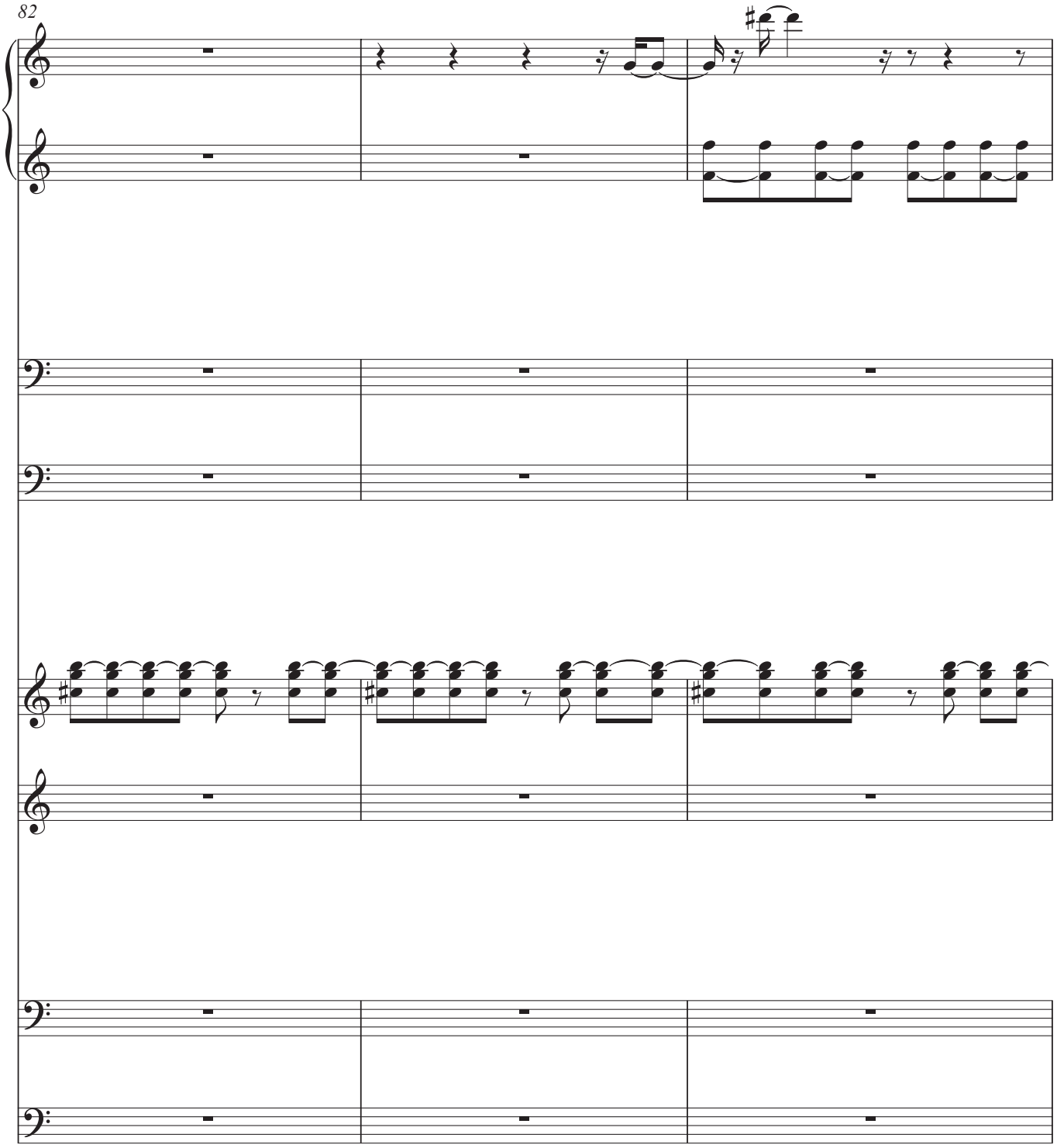

(8)
71
Ped.

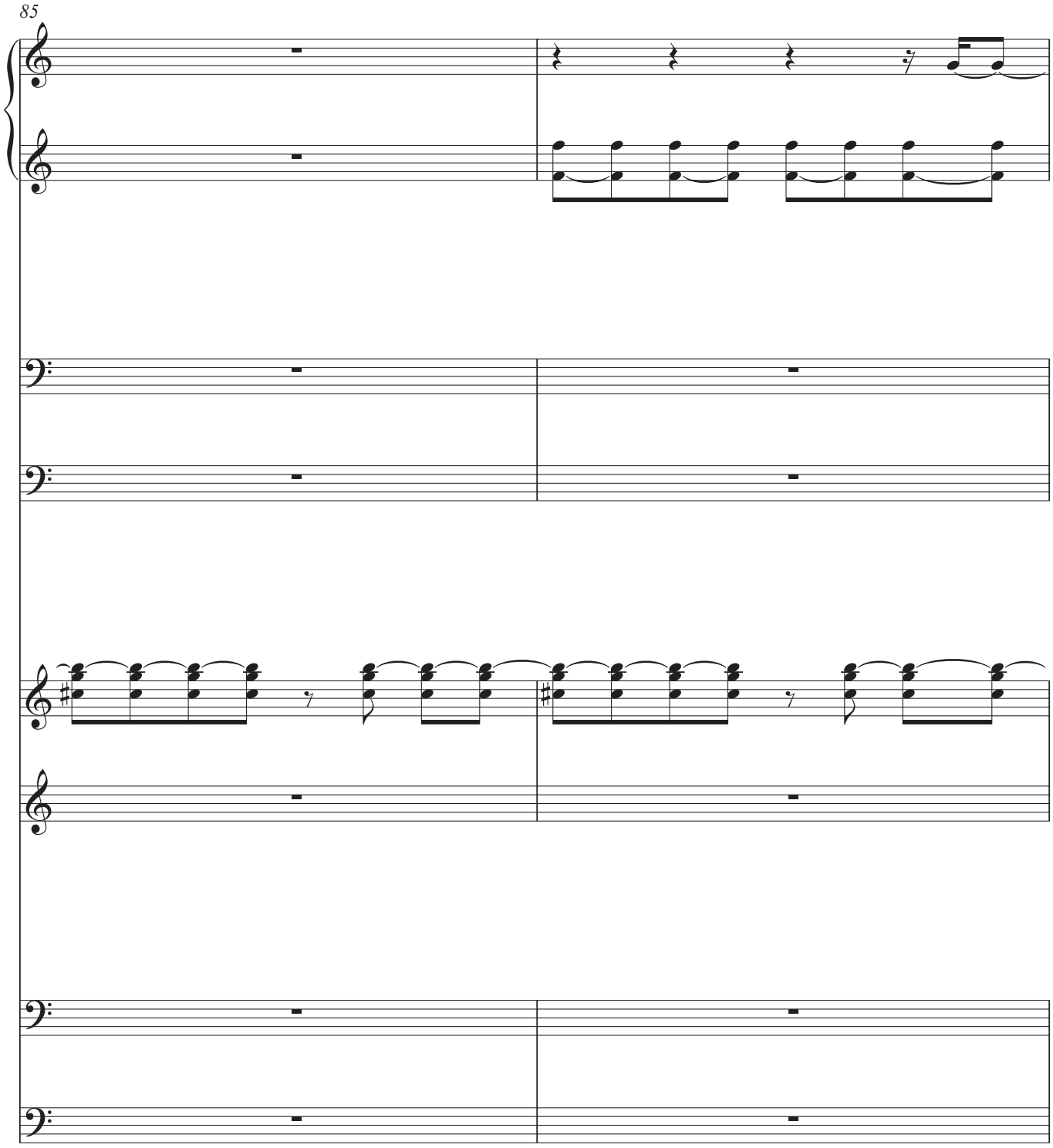

(8)
73

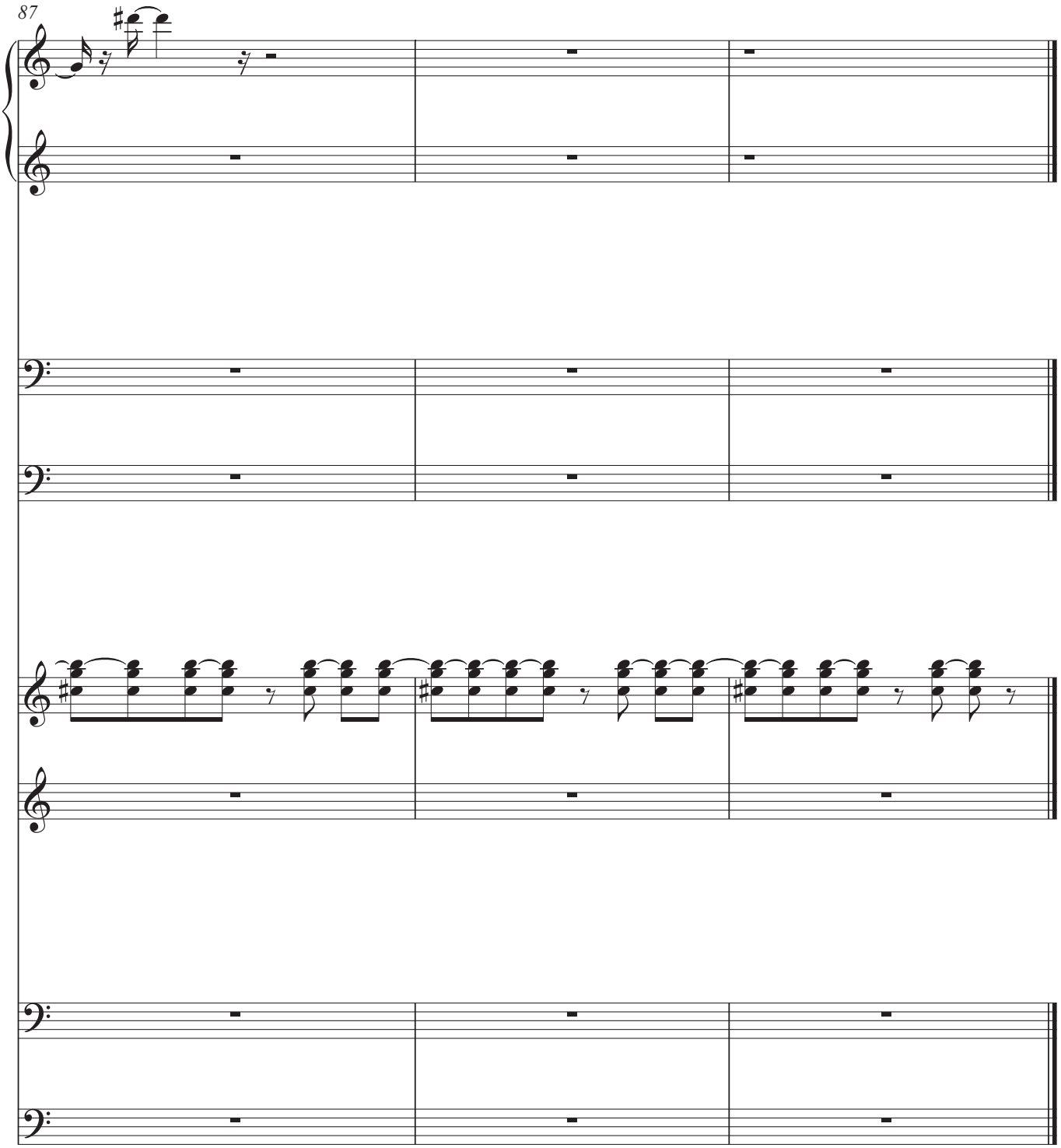

(8)
75
8vb
Ped.


(8)
77


79
mf


82

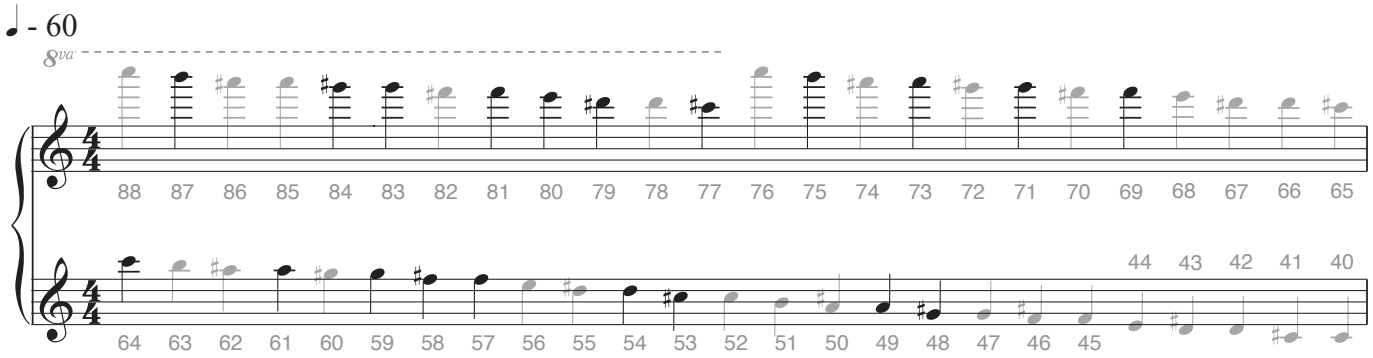

85


87

Sincronía

Mapa de datos para movimiento no.4: 'Estado físico límite ó Prestissimo'

Estado rítmico cardiaco máximo de 33 especies animales (clave de Sol)



88: Siphonaptera [Pulga, do 9] l s/d
87: Cimex lectularius [Chinche, **si 8**] **l 1/8**
86: Lepidoptera [Mariposa, la#8] l s/d
85: Anisoptera [Libelula, la 8] l s/d
84: Hylotrupes bajulus [Polilla, **sol#8**] **l 1/4 1/8**
83: Caelifera [Saltamontes, **sol 8**] **l c**
82: Pycnogonida [Araña de mar, fa#8] l s/d
81: Achaearanea tepidariorum [Araña, **fa 8**] **l 1/8**
80: Helix aspersa [Caracol, **mi 8**] **l 1/4 1/8**
79: Mesodesma mactroides [Almeja, **re#8**] **l 3/4**
78: Mytilus galloprovincialis [Mejillón, re 8] l s/d
77: Podarcis hispanicus [Lagartija, **do#8**] l **1/16 1/32**
76: Caridea [Camarón, do 8] l s/d
75: Palinurus elephas [Langosta, **si 7**] **l 1/8 1/32**
74: Carcinus maenas [Cangrejo, la#7] l s/d
73: Salamandra [Salamandra, **la 7**] **l c**
72: Trochilinae [Colibrí, sol#7] l s/d
71: Rattus norvegicus [Rata, **sol 7**] **l c**
70: Asteroidea [Estrella de mar, fa#7] l s/d
69: Passer domesticus [Gorrión, **fa 7**] **l c**
68: Pelophylax perezi [Rana, mi 7] l s/d
67: Bufo bufo [Sapo, re #7] l s/d
66: Serpentes [Serpiente, re 7] l s/d
65: Didelphimorphia [Zarigüeya, do #7] l s/d
64: Suncus murinus [Musaraña, **do 7**] **l c**
63: Corynorhinus townsendii [Murciélago, si 6] l s/d
62: Columba livia [Paloma, la#6] l s/d
61: Iguanidae [Iguana, **la 6**] **l 1/8 1/64**
60: Mustela putorius furo [Hurón, sol#6] l s/d
59: Erinaceinae [Erizo, **sol 6**] **l c**
58: Thunnus [Atún, **fa#6**] **l 1/16 1/32**
57: Oryctolagus cuniculus [Conejo, **fa 6**] **l c**
56: Nothura maculosa [Perdice, mi 6] l s/d
55: Melopsittacus undulatus [Perico, re#6] l s/d
54: Gallus gallus domesticus [Gallina, **re 6**] **l c**
53: Anas platyrhynchos domesticus [Pato, **do#6**] **l c**
52: Anser anser [Ganso, do 6] l s/d
51: Falco peregrinus [Halcón, si 5] l s/d
50: Accipitridae [Águila, la#5] l s/d
49: Grus grus [Cisne, **la 5**] **l c**
48: Felis silvestris catus [Gato, **sol#5**] **l 1/16**
47: Erethizon dorsatum [Puercoespín, sol 5] l s/d
46: Dasypodidae [Armadillo, fa#5] l s/d
45: Talpa europaea [Topo, fa 5] l s/d
44: Marmota marmota [Marmota, mi 5] l s/d
43: Strigidae [Buho, re #5] l s/d
42: Ornithorhynchus anatinus [Ornitorrinco, re 5] l s/d
41: Pelecanus onocrotalus [Pelicano, do #5] l s/d
40: Testudines [Tortuga, do 5] l s/d

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

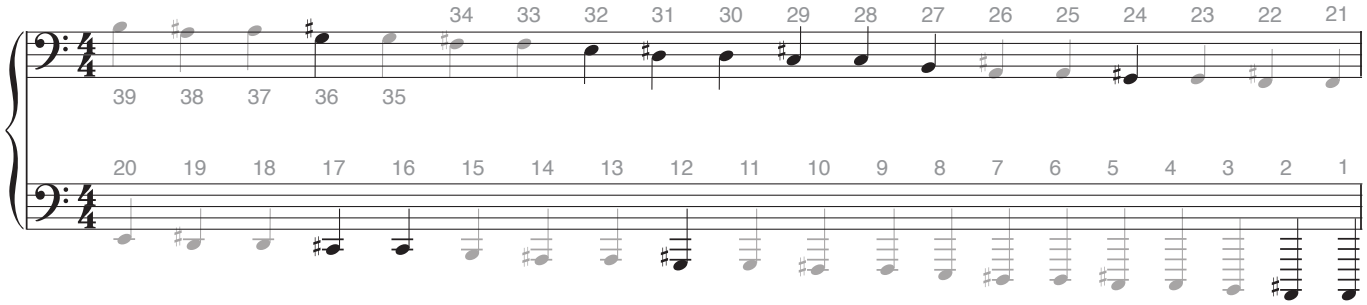
Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

Sincronía

Mapa de datos para movimiento no.4: 'Estado físico límite ó Prestissimo'

Estado rítmico cardiaco máximo de 33 especies animales (clave de Fa)

♩ - 60



39: Apteryx australis [Kiwi, si 4] l s/d
38: Phascolarctos cinereus [Koala, la#4] l s/d
37: Octopus vulgaris [Pulpo, la 4] l s/d
36: Vulpini [Zorro, **sol#4**] **l c**
35: Pan troglodytes [Chimpance, sol 4] l s/d
34: Canis latrans [Coyote, fa#4] l s/d
33: Canis lupus familiaris [Perro, fa 4] l s/d
32: Canis lupus [Lobo, **mi 4**] **l 1/16**
31: Ovis orientalis aries [Oveja, **re#4**] **l 1/8**
30: Capra aegagrus hircus [Cabra, **re 4**] **l 1/16 1/32 1/64**
29: Spheniscidae [Pingüino, **do#4**] **l 1/16**
28: Homo sapiens [Humano, **do 4**] **l 1/16 1/32**
27: Sus scrofa domestica [Cerdo, **si 3**] **l 1/16 1/32 1/64**
26: Equus africanus-ferus [Mula, la#3] l s/d
25: Lacertilia [Lagarto, la 3] l s/d
24: Cervus elaphus [Venado, **sol#3**] **l 1/16 1/32**
23: Antilope cervicapra [Antílope, sol 3] l s/d
22: Macropus giganteus [Cangüro, fa#3] l s/d
21: Panthera leo [León, fa 3] l s/d
20: Panthera tigris [Tigre, mi 3] l s/d
19: Rhea americana [Avestruz, re#3] l s/d
18: Lama glama [Llama, re 3] l s/d
17: Phoca vitulina [Foca, **do#3**] **l 1/16 1/32**
16: Equus ferus caballus [Caballo, **do 3**] **l 1/16 1/32**
15: Camelus bactrianus [Camello, si 2] l s/d
14: Odobenus rosmarus [Morsa, la#2] l s/d
13: Gorilla [Gorila, la 2] l s/d
12: Tursiops truncatus [Delfín, **sol#2**] **l c**
11: Bos primigenius taurus [Vaca, sol 2] l s/d
10: Bos primigenius taurus [Toro, fa#2] l s/d
9: Bos primigenius taurus [Buey, fa 2] l s/d
8: Ursus arctos arctos [Oso, mi 2] l s/d
7: Otaria flavescens [Lobo Marino, re#2] l s/d
6: Bos primigenius indicus [Cebuino, re 2] l s/d
5: Bison bison [Búfalo, do#2] l s/d
4: Selachimorph [Tiburón, do 2] l s/d
3: Giraffa camelopardalis [Girafa, si 1] l s/d
2: Loxodonta africana [Elefante, **la#1**] **l 1/4 1/32**
1: Balaena mysticetus [Ballena, **la 1**] **l 1/4 1/8**

s/d: Sin datos encontrados
c: Continuo, el ritmo es tan veloz que es percibido como una frecuencia continua, se interpreta como una nota prolongada.

Nota: Cada ritmo definido por especie es la conversión entre un dato encontrado en Pulsaciones Por Minuto (PPM o BPM -beat per minute- o Hz -hercios, ciclos por segundo-) a notación musical para 4/4, el ritmo final utilizado para el movimiento de la composición depende de la cantidad de datos encontrados y puede corresponder a sólo un espectro del rango posible de pulsaciones dentro del estado físico estudiado de la especie.

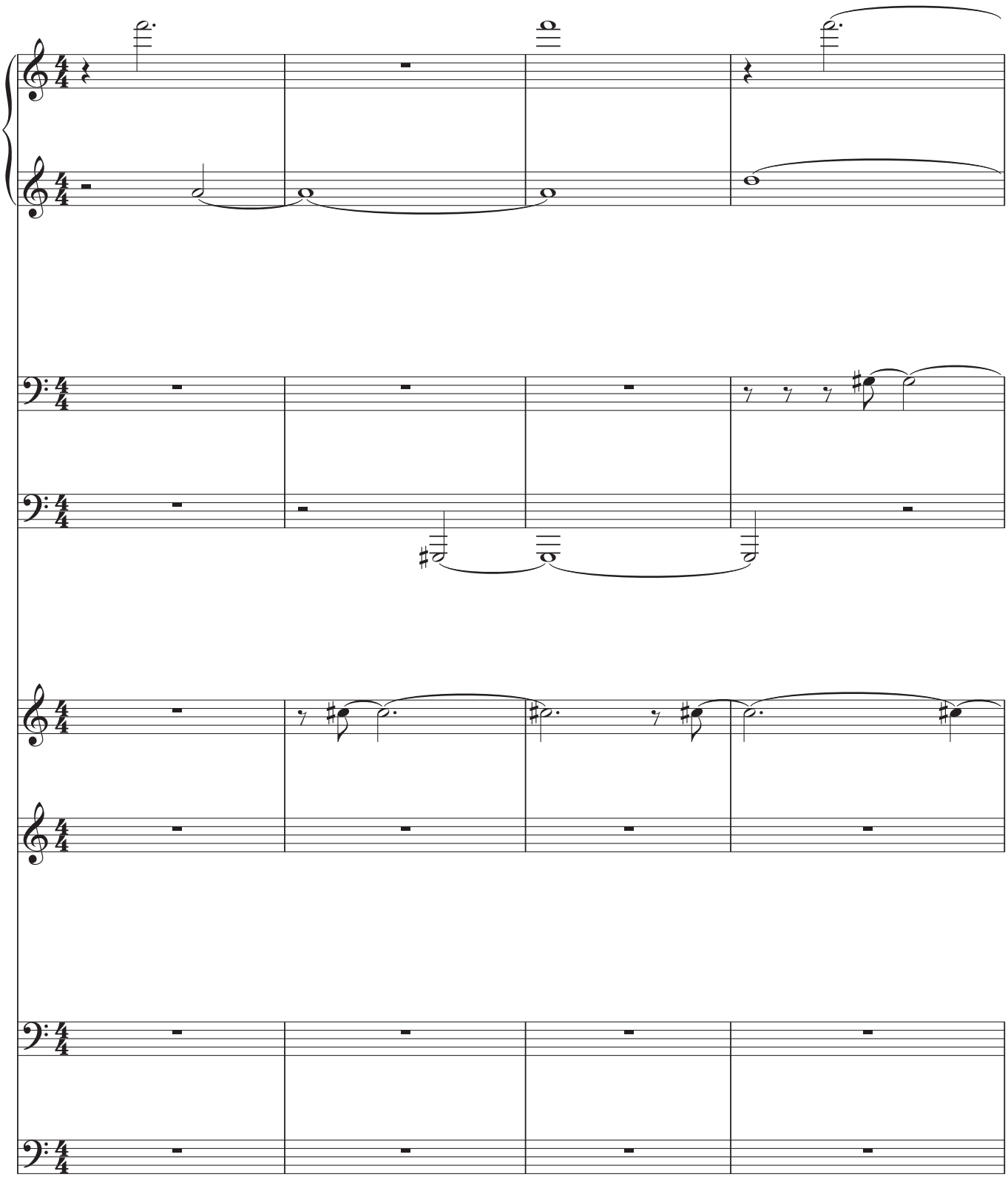
Sincronía

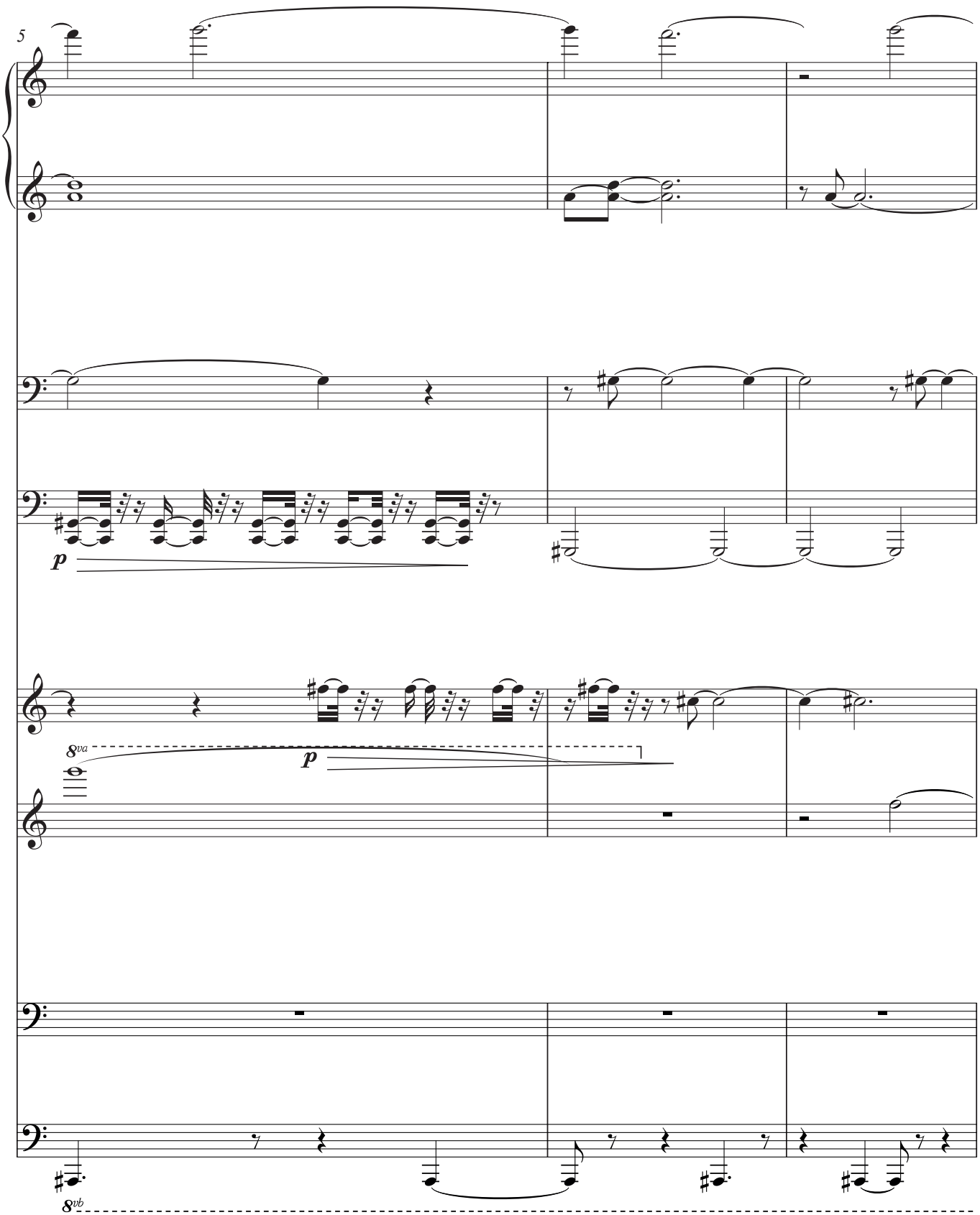
Movimiento no.4: 'Estado físico límite ó Prestissimo'

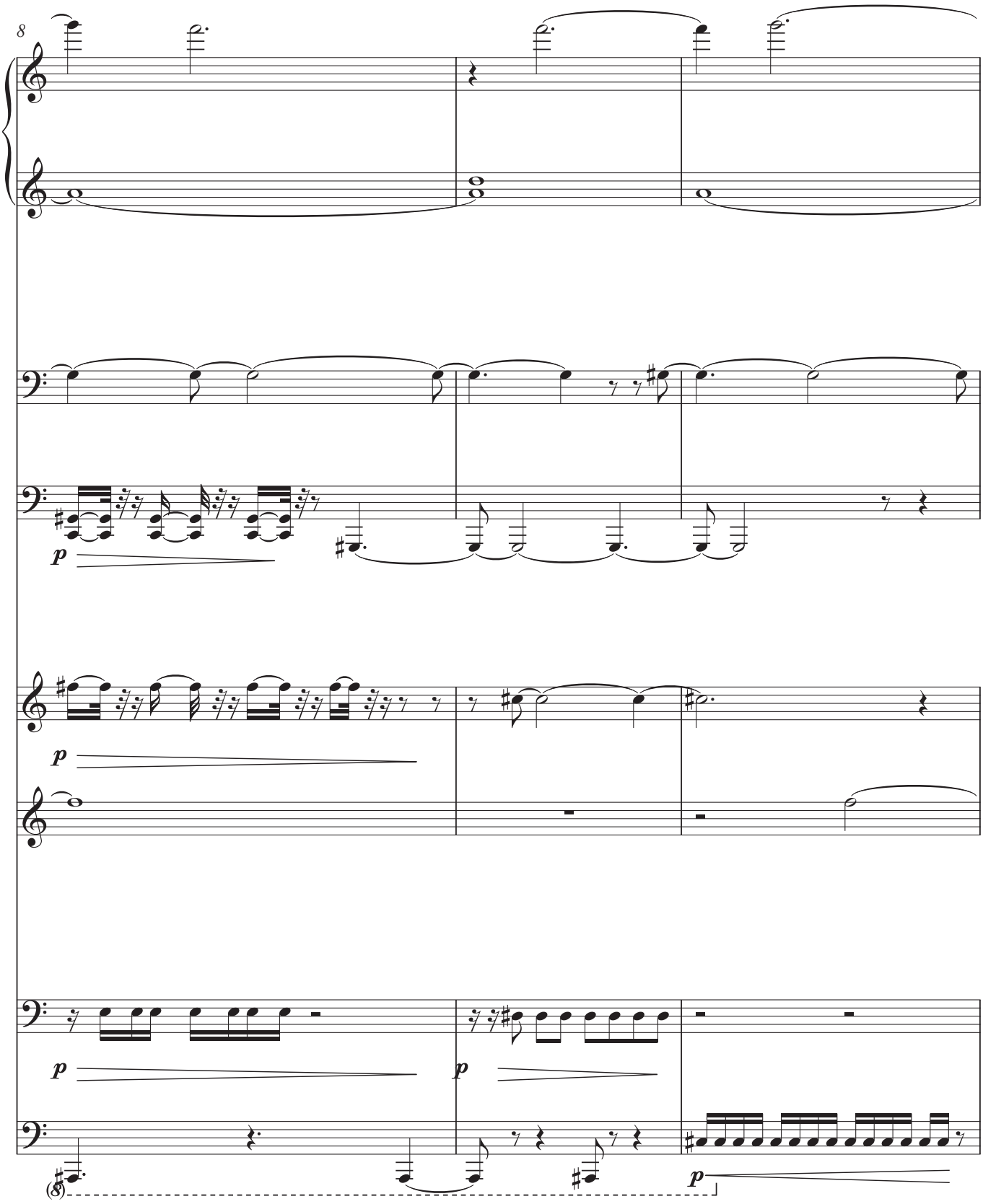
Estado rítmico cardiaco máximo de 33 especies animales

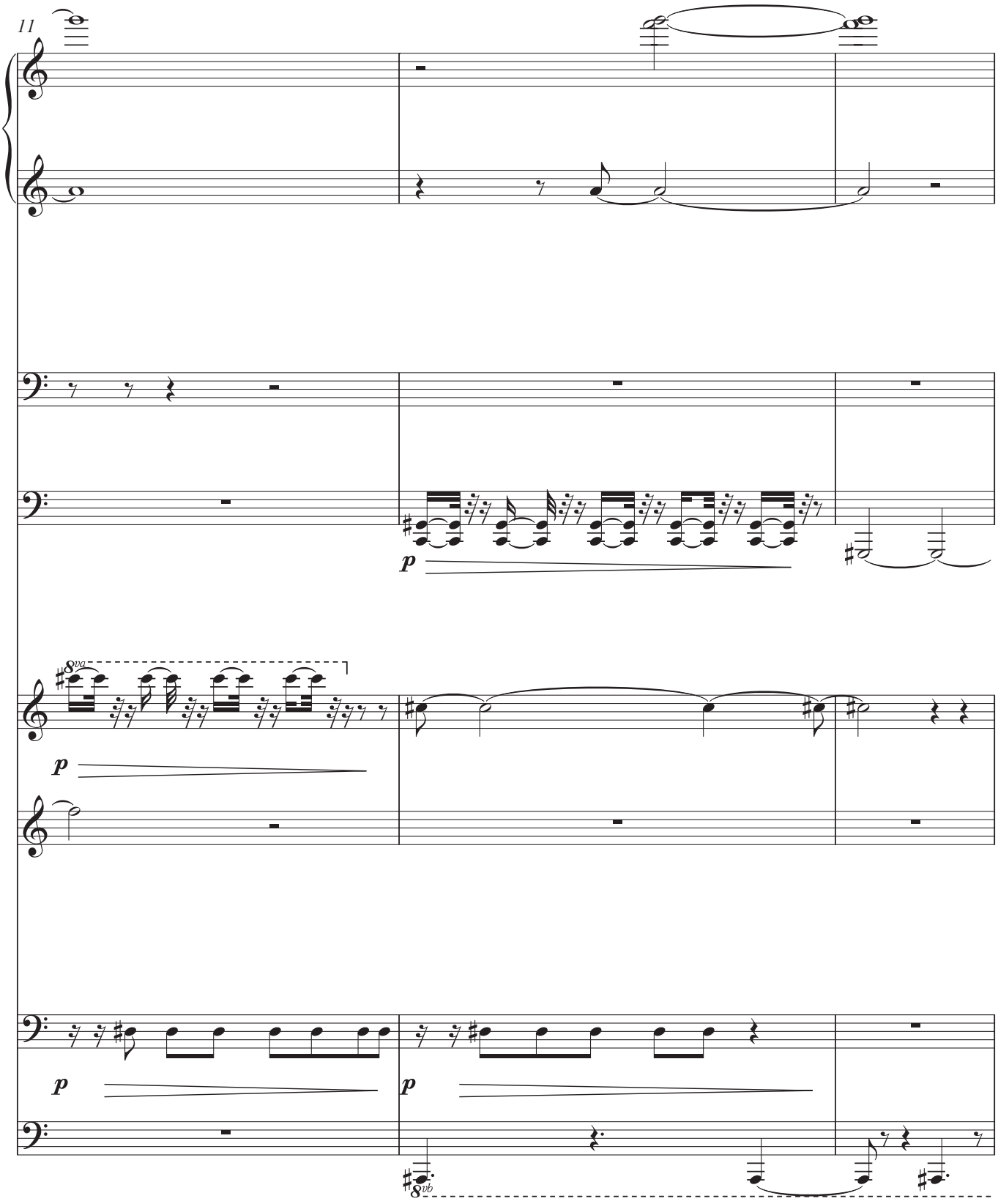
Lorena Mal
Emilio Hinojosa Carrión
[2013-2014]

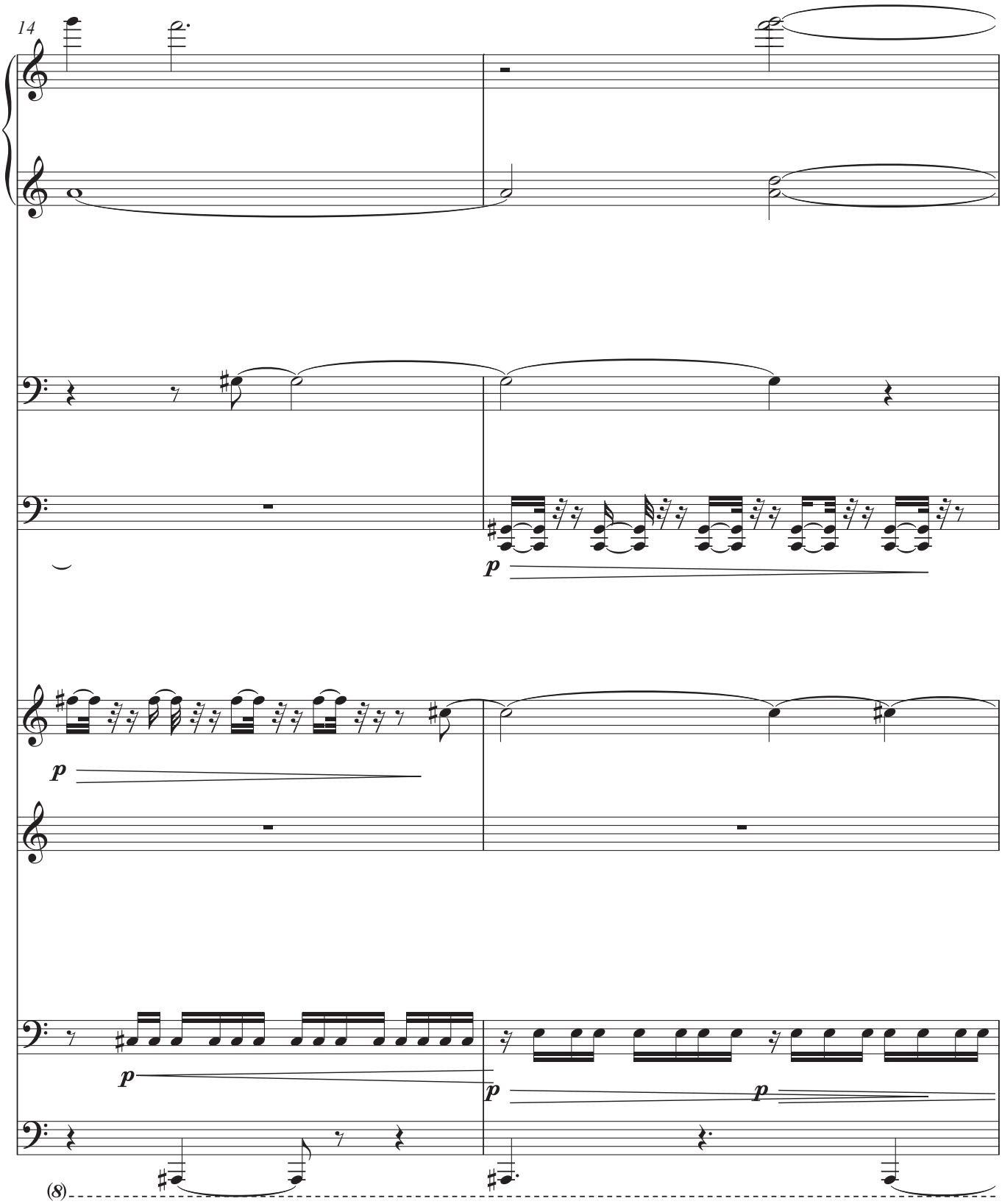
♩ - 60

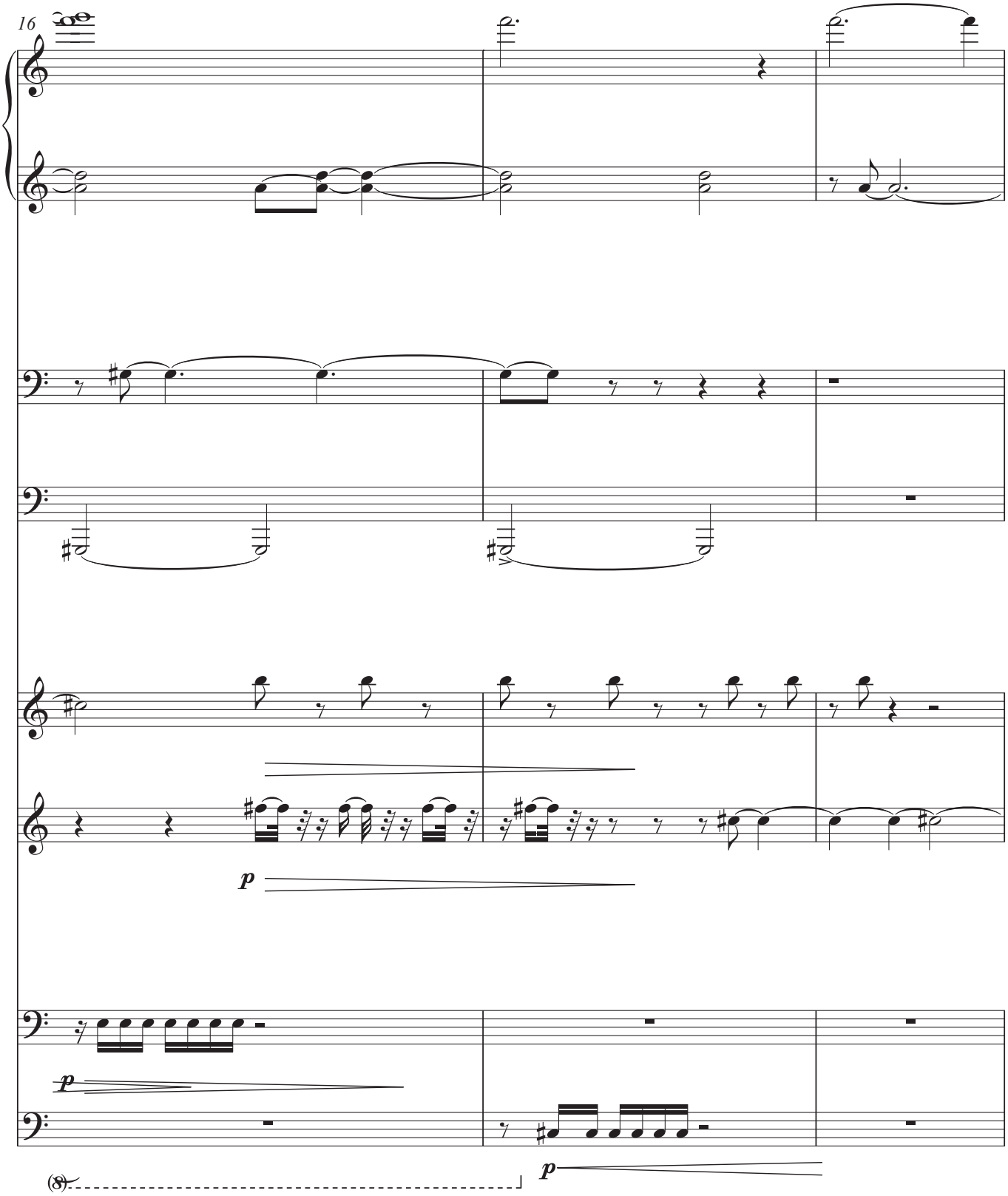


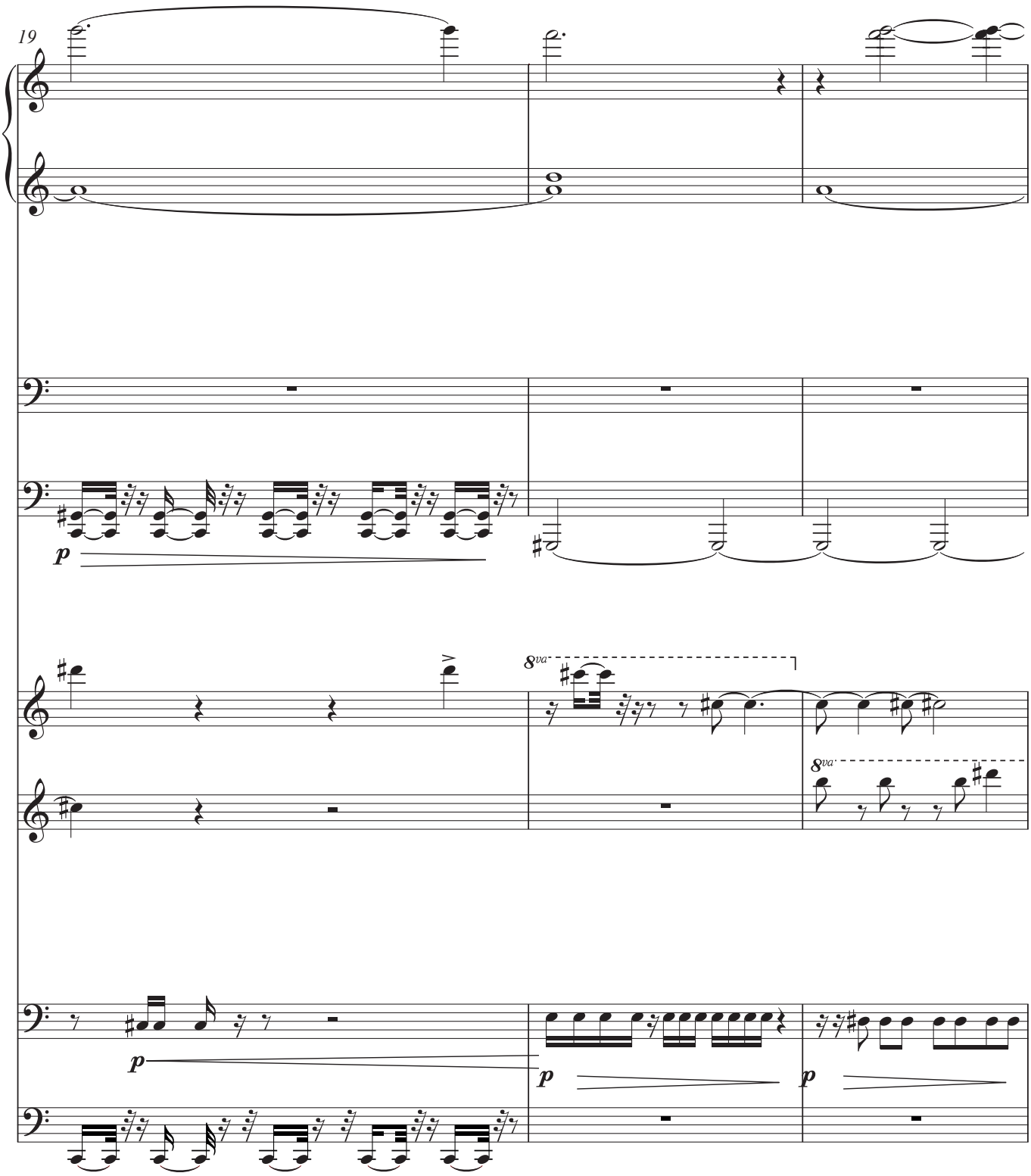

5
p
8va
p
8vb

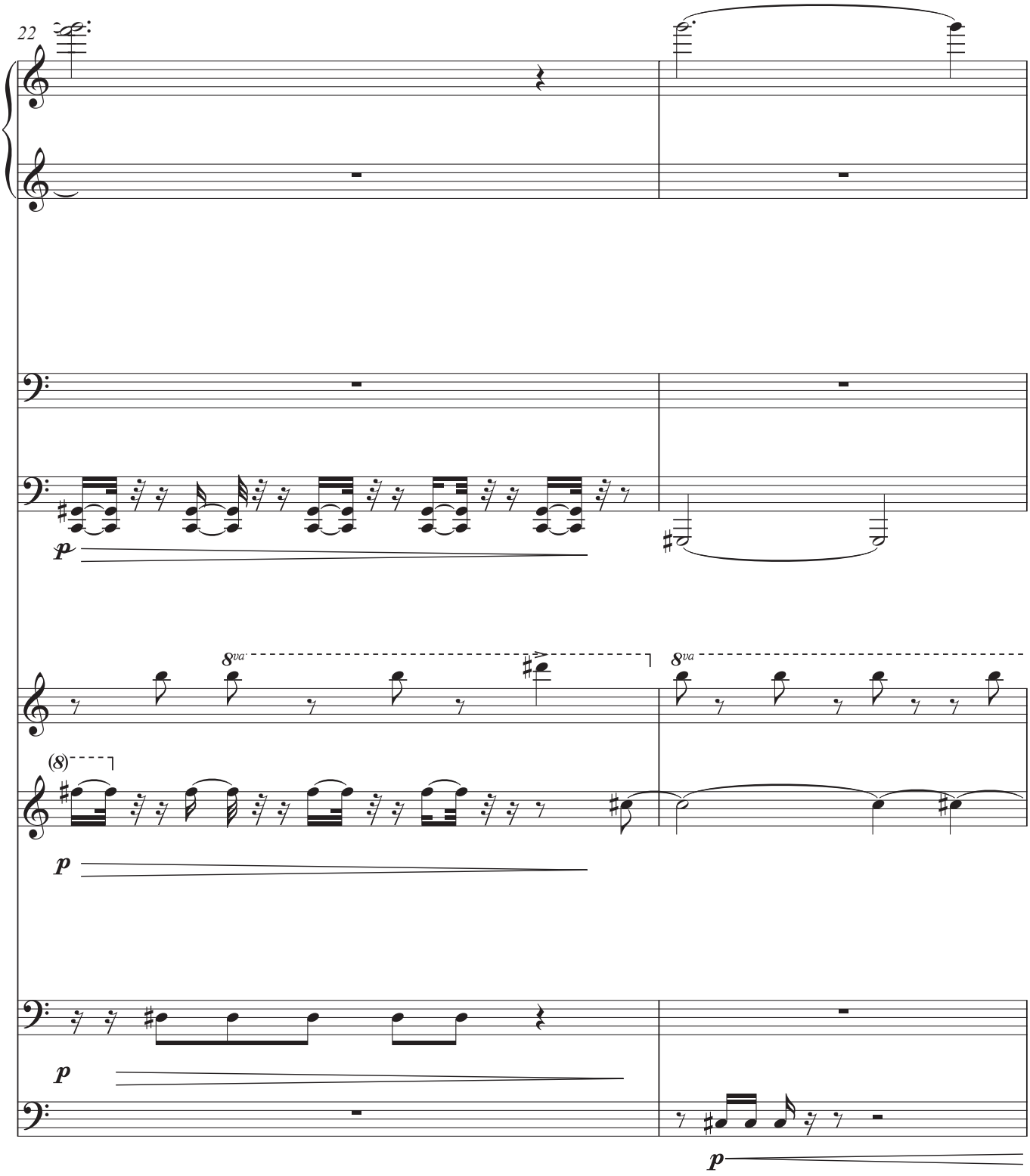

8
p
p
p
p
p
(8)

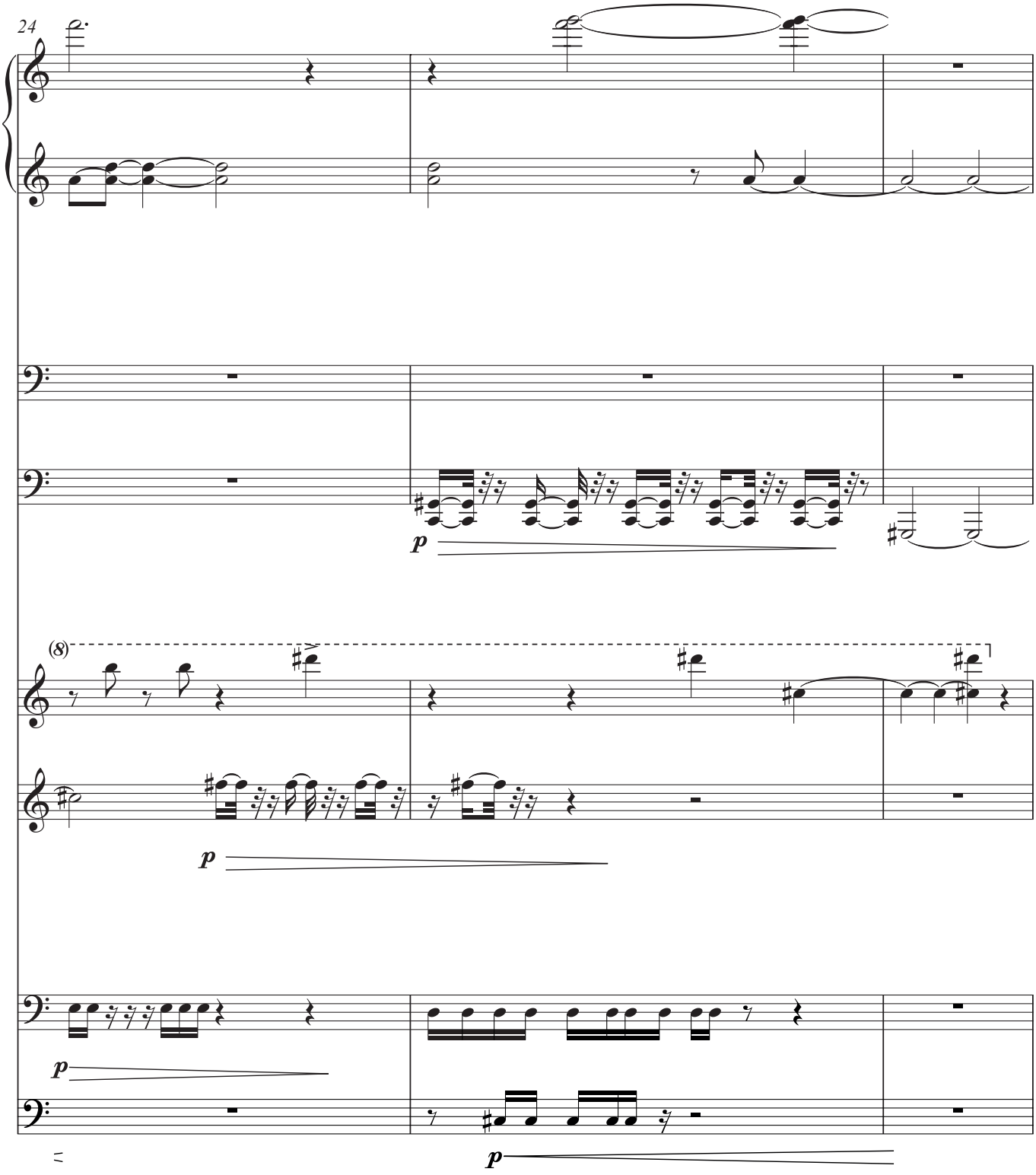

11
p
8va
p
p
p
8vb

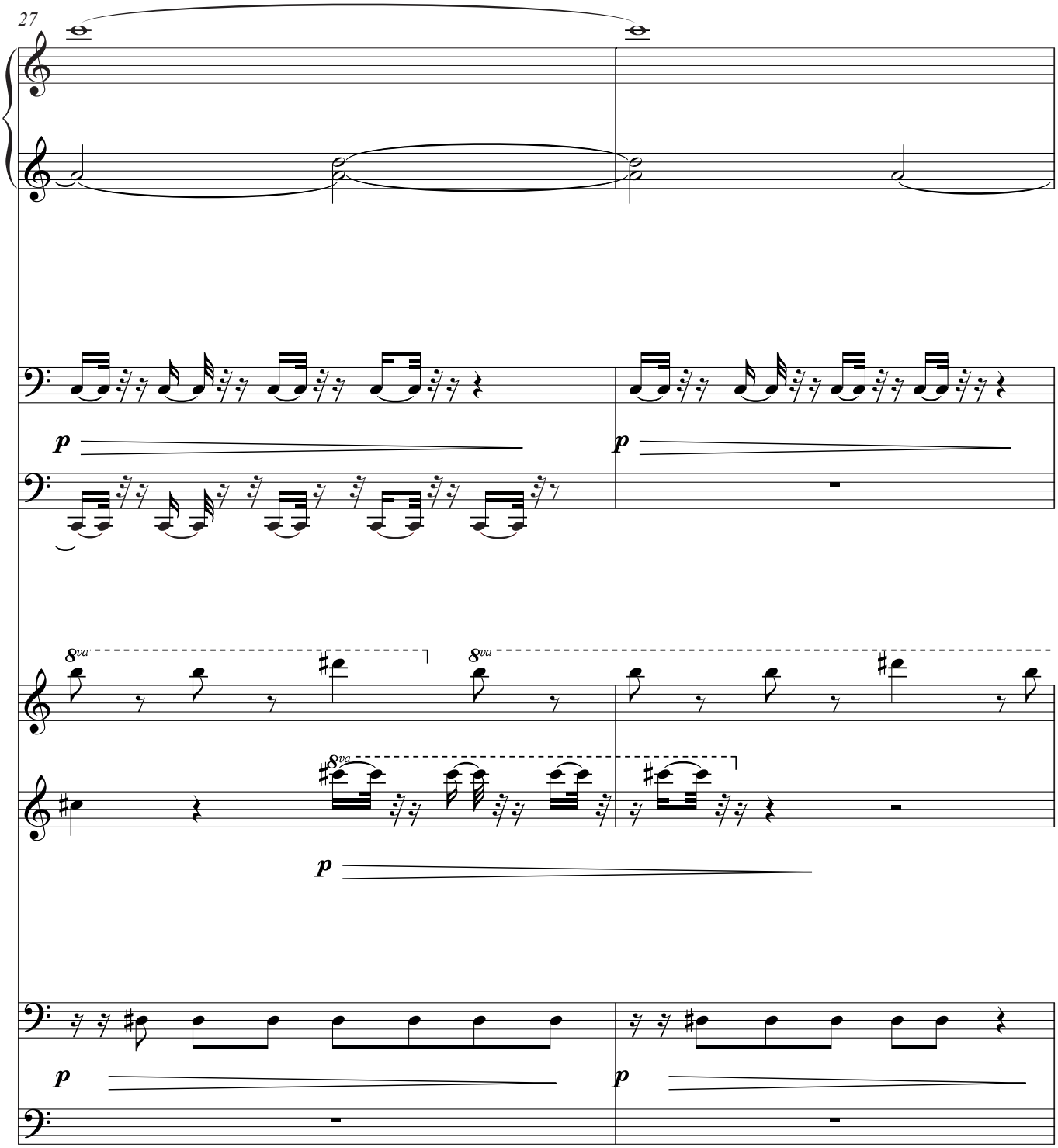

14
p
p
p
p
p
(8)

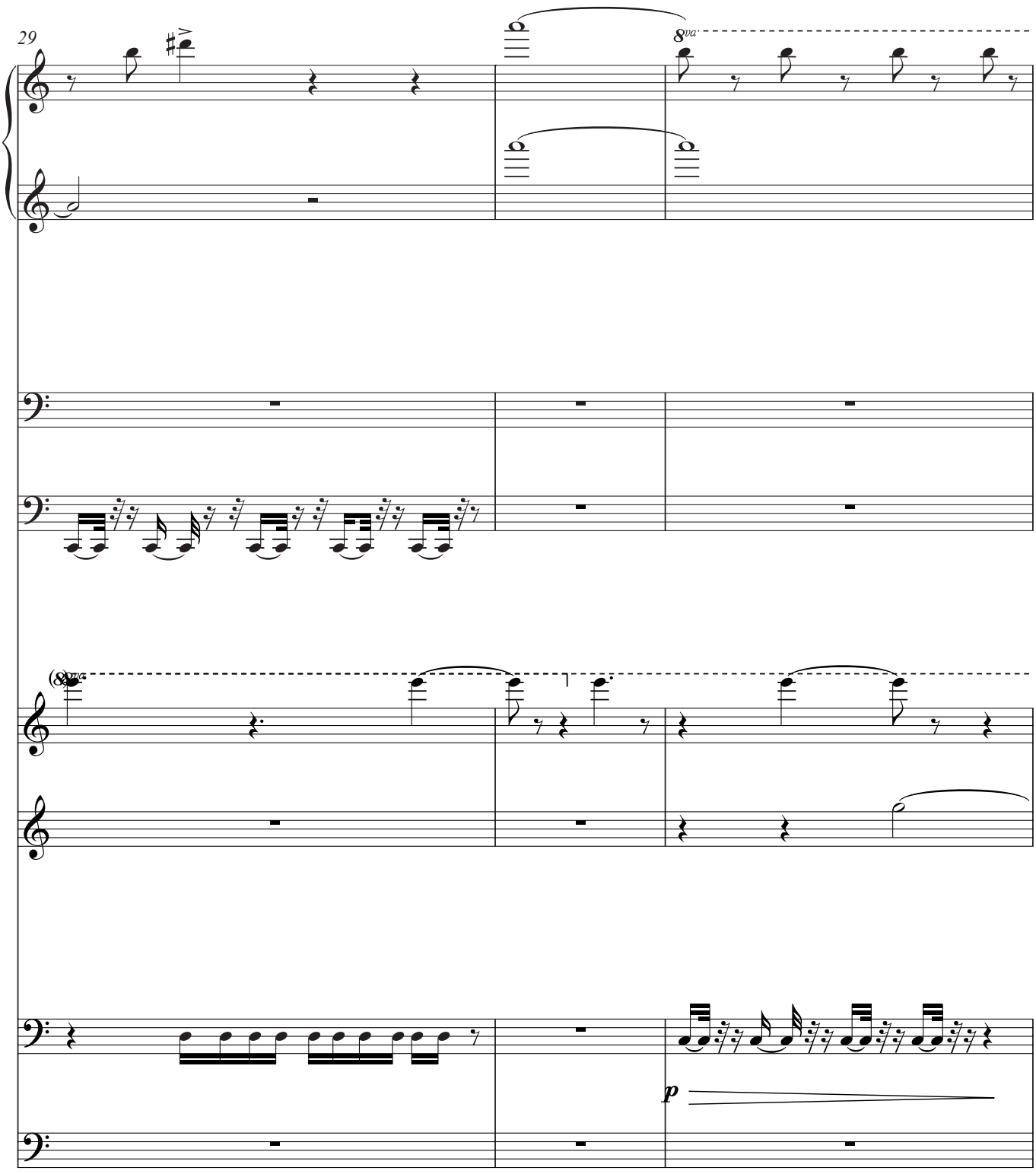

16
p
p
p
(8)

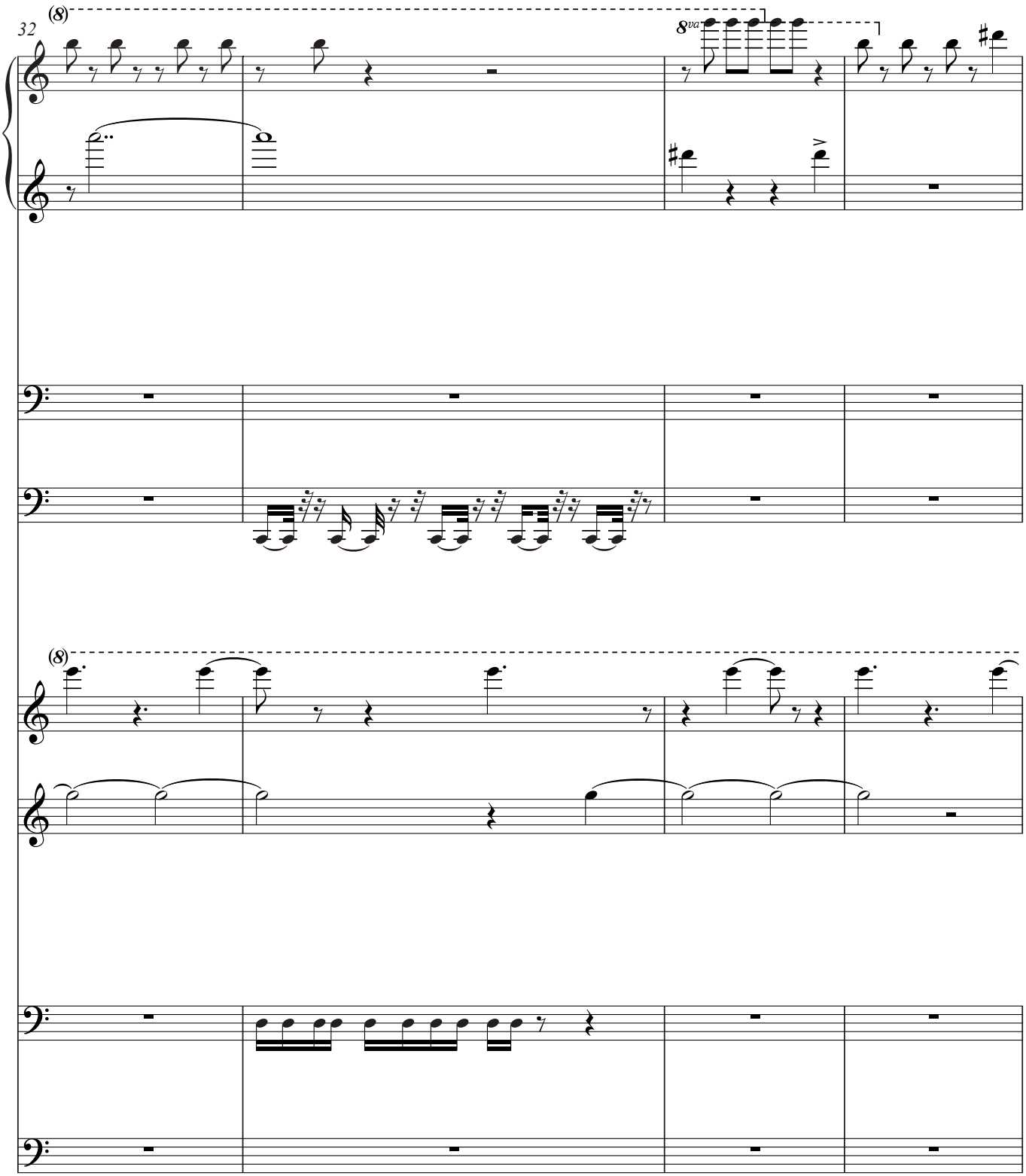

19
p
8va
8va
p
p
p

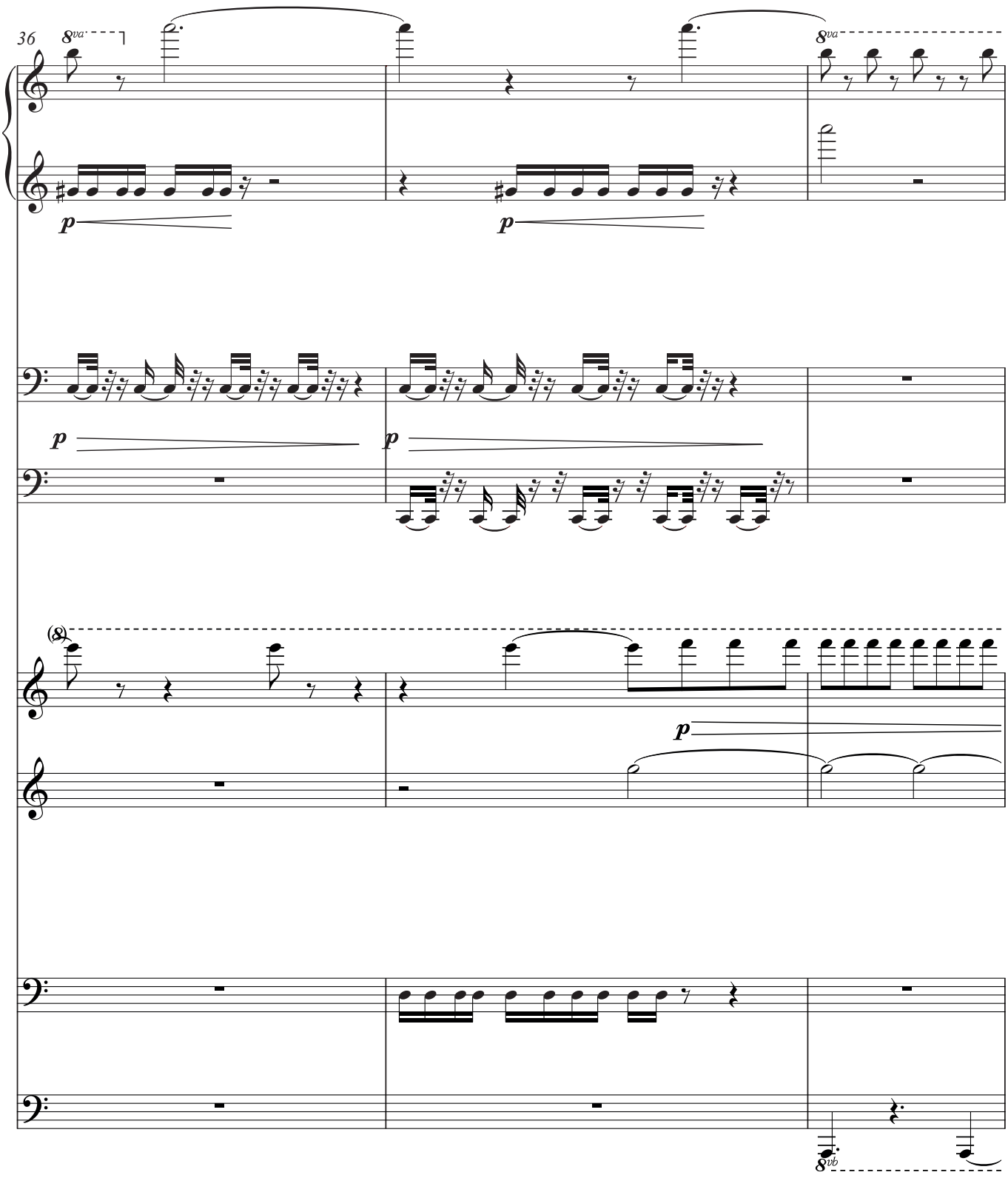

22
8va
8va
(8)
p
p
p
p

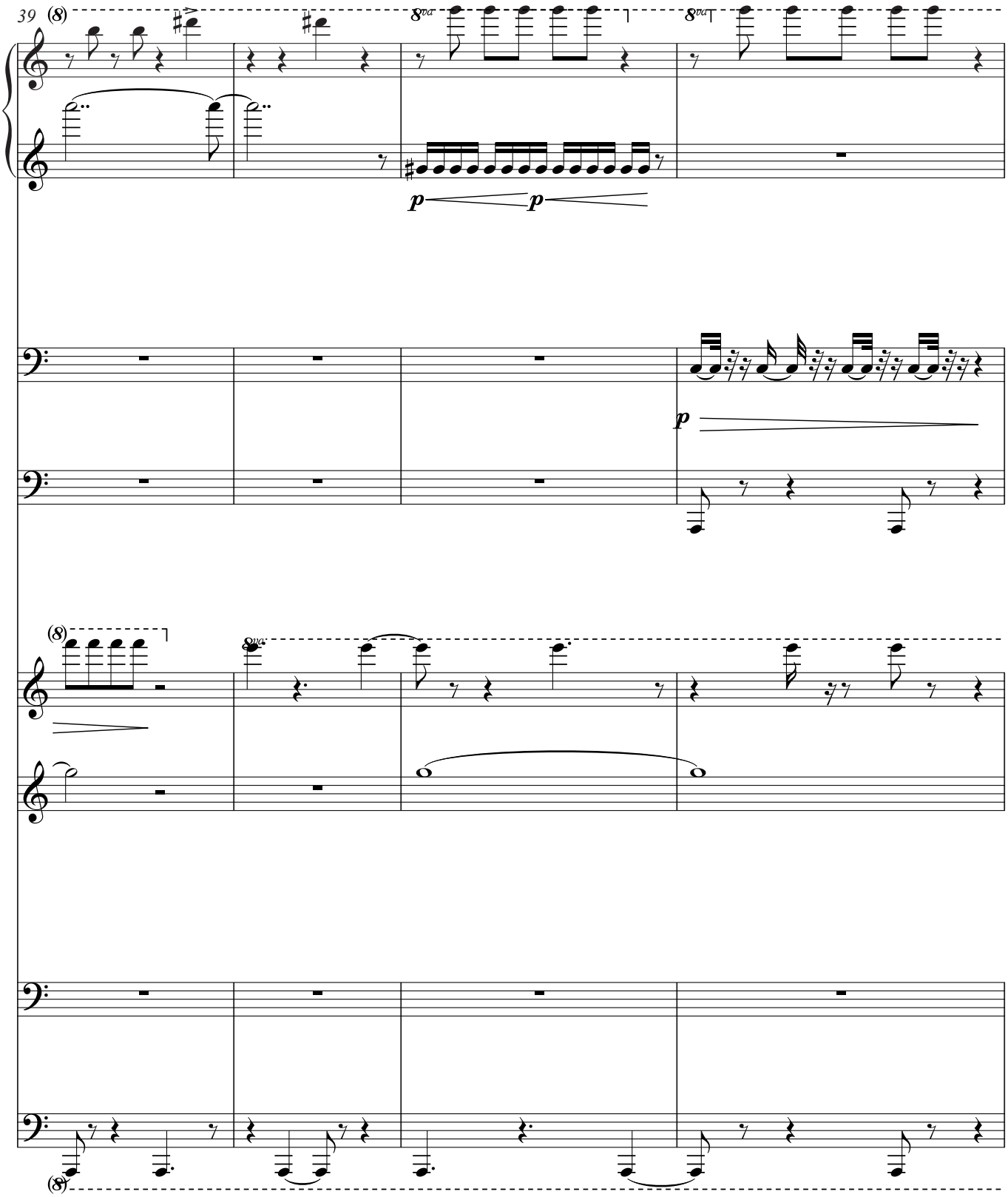

24
(8)
p
p
p
p

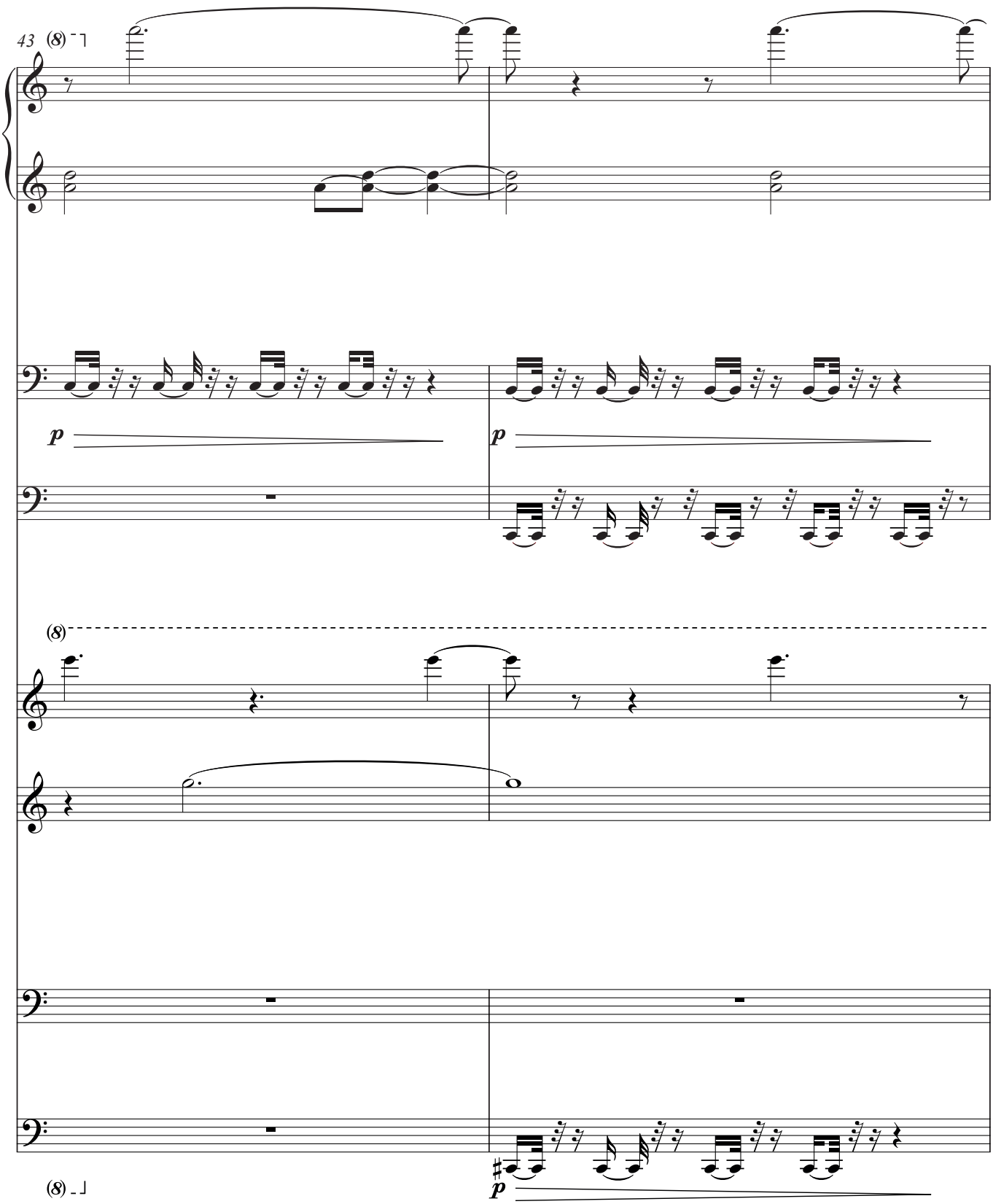

27
p
p
8va
8va
8va
p
p
p

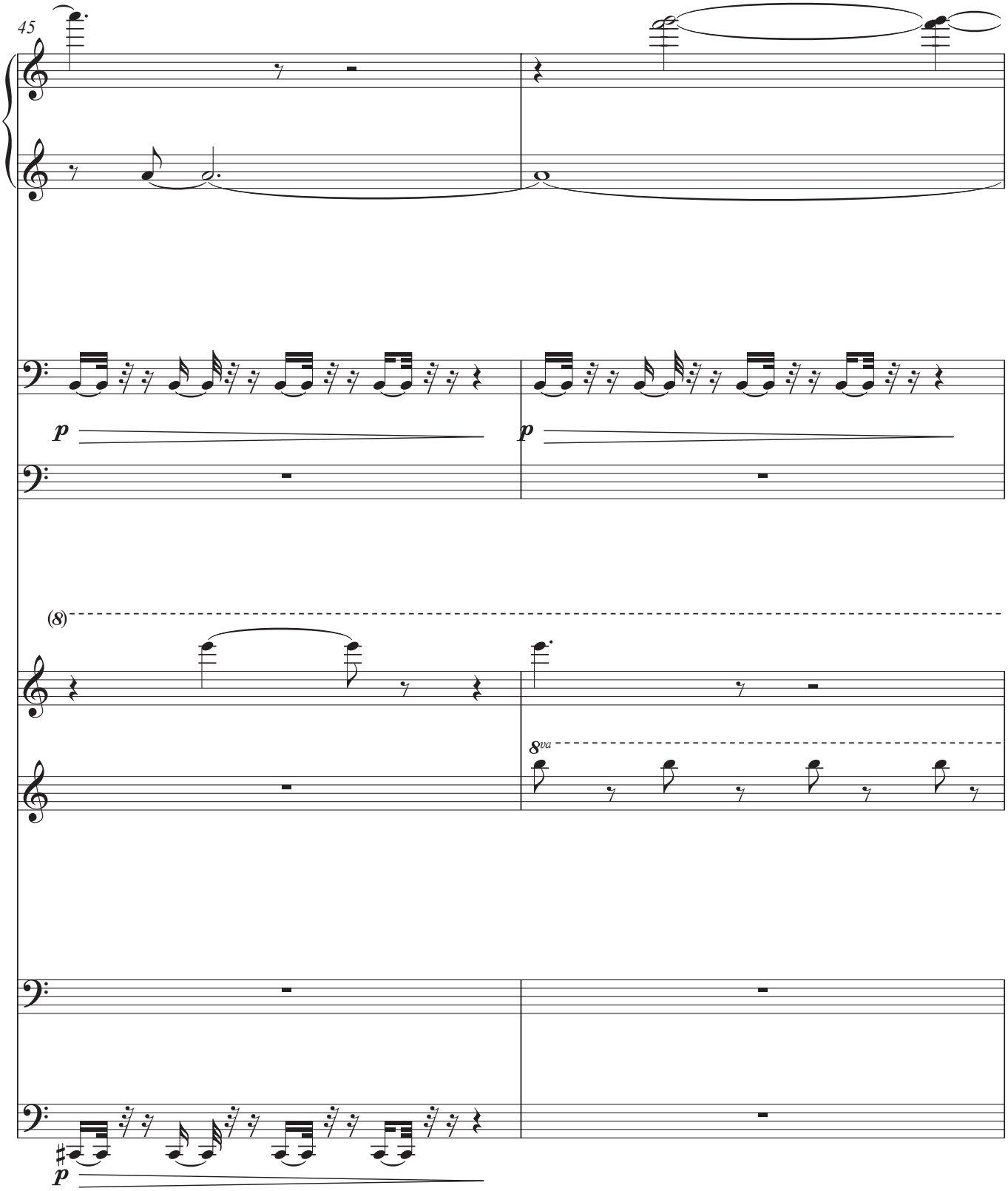

29
8va
8va
p

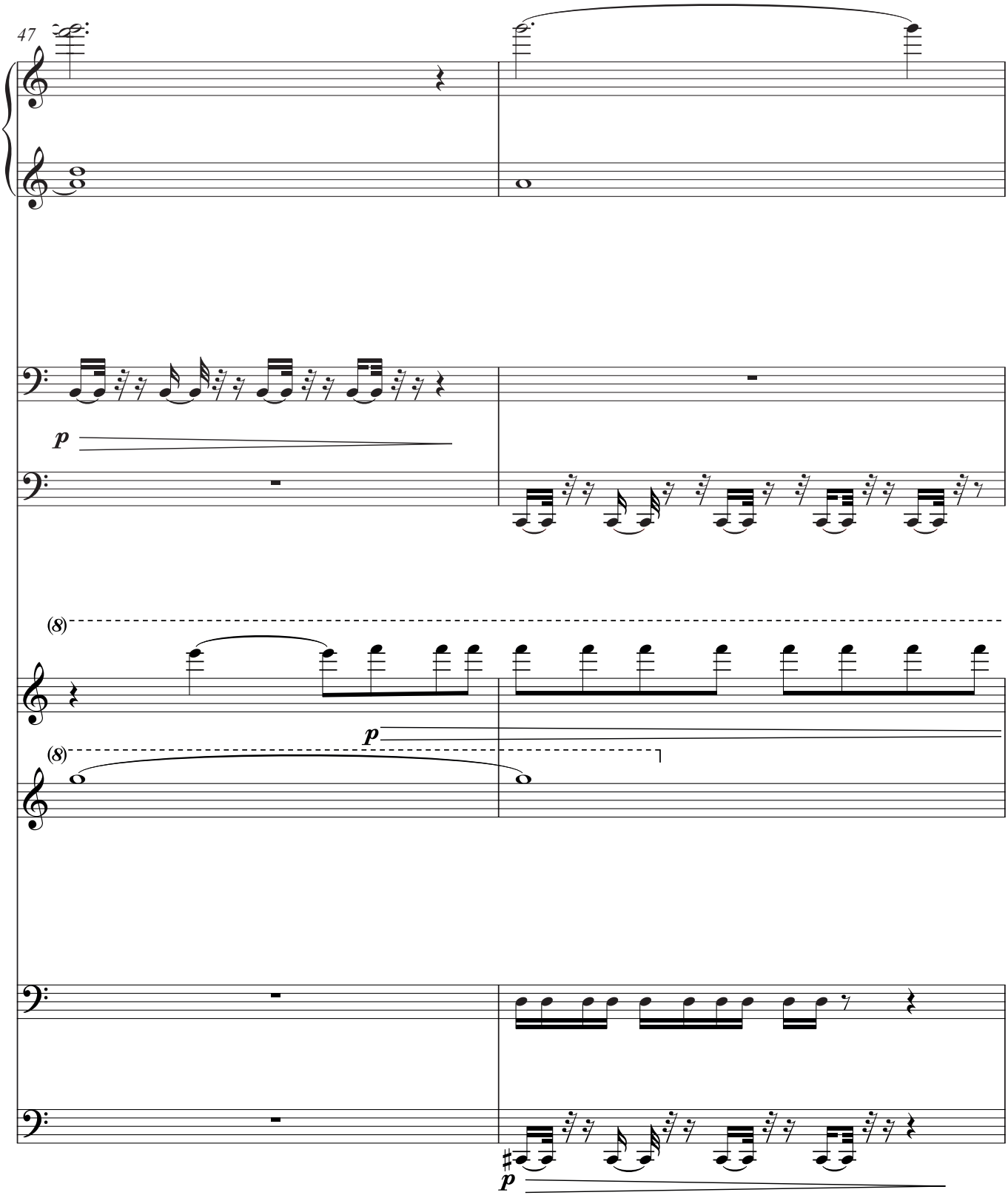

32
(8)
8va
(8)

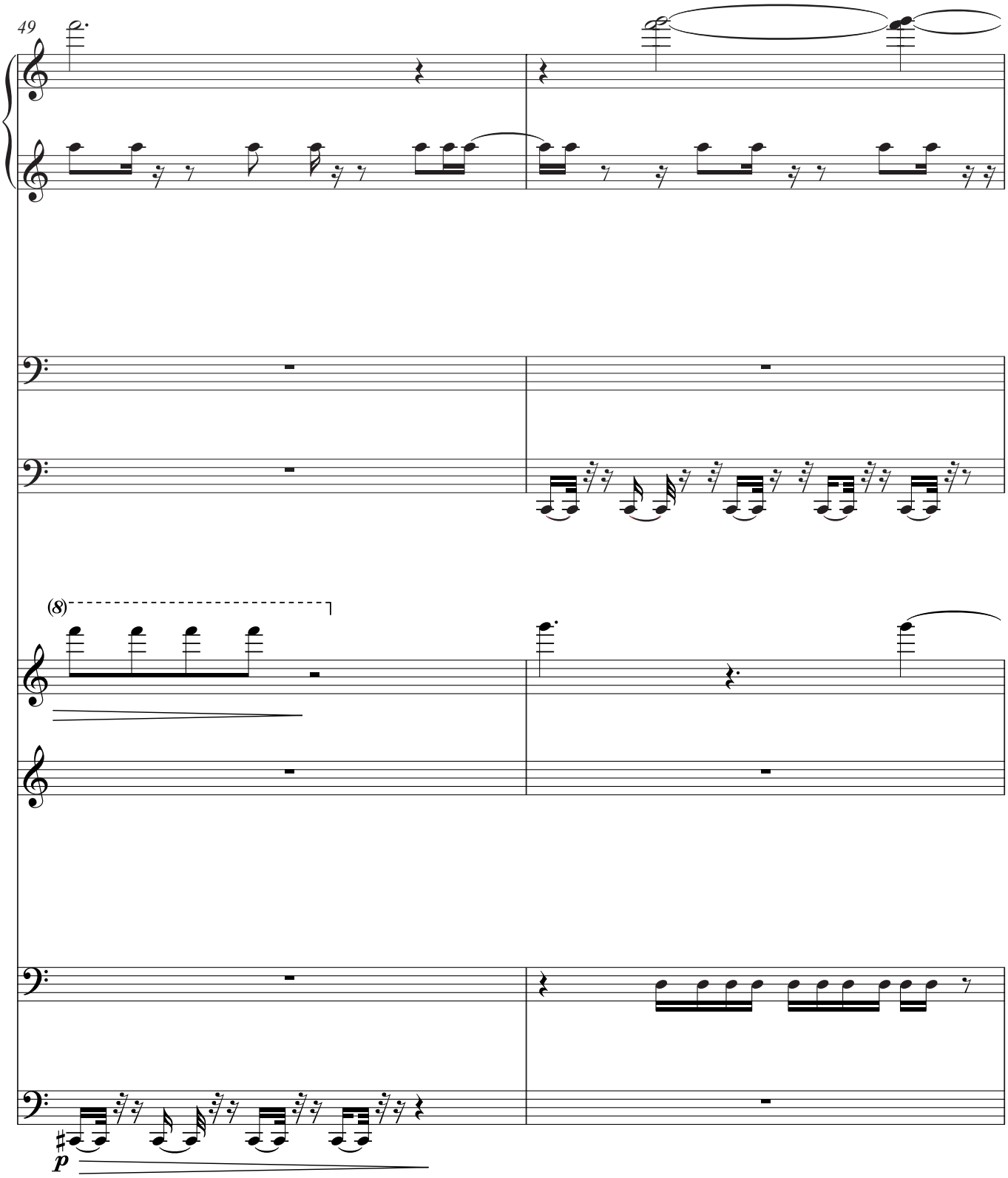

36
8va
8va
p
p
p
p
(8)
p
8vb

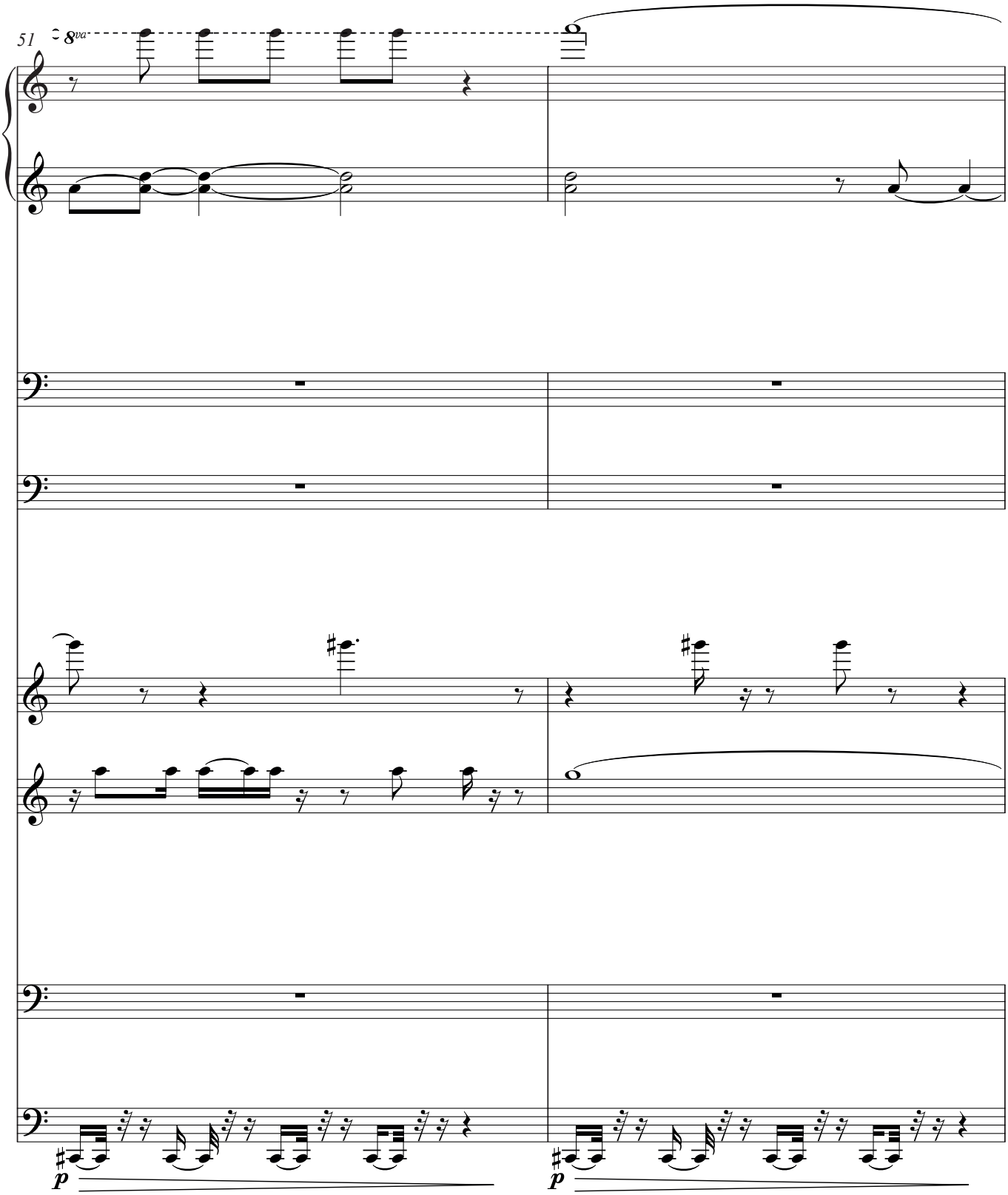

39
(8)
8va
8va
p
p
p
(8)
8va
(8)

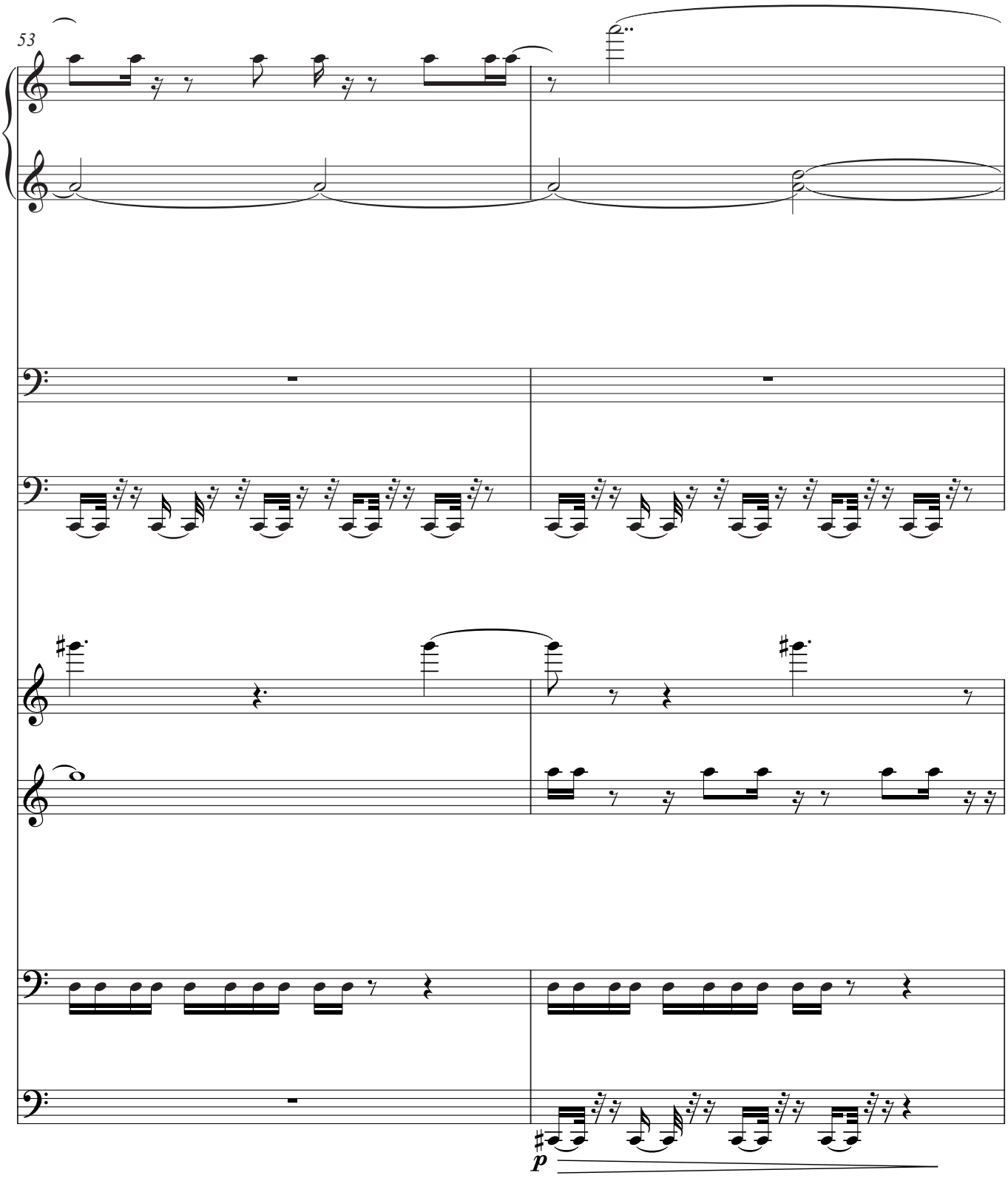

43
(8)
p
p
(8)
(8)
p

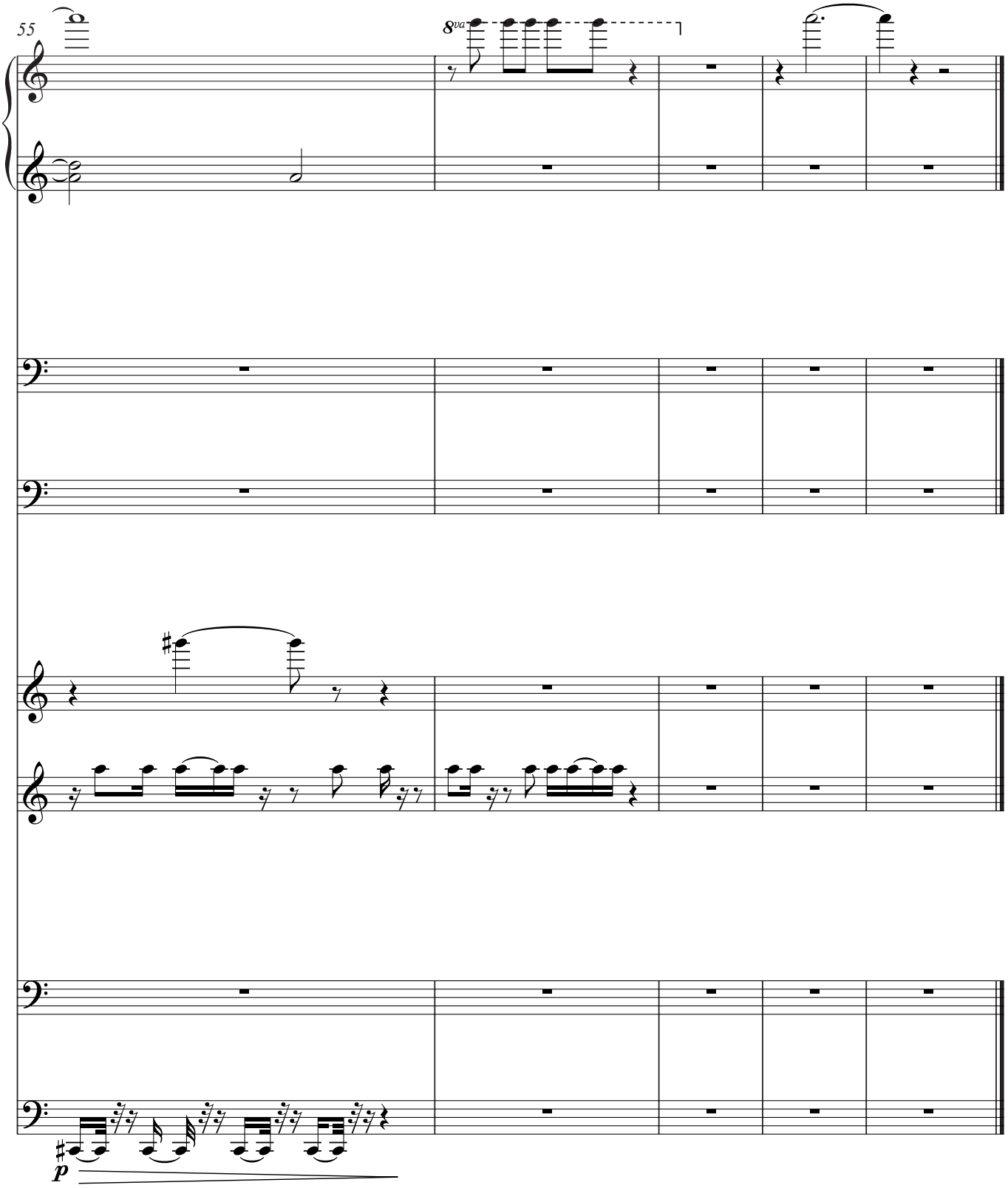

45
p
p
(8)
8va
p


47
p
(8)
p
(8)
p


49
(8)
p


51
8va
p
p


53
p


55
8va
p